RESEARCH DAY 2014

April 11, 2014
(7:30AM – 4:00PM)

University of Arkansas for
Medical Sciences
I. Dodd Wilson Education Building
4301 West Markham Street
Little Rock, Arkansas 72205

College of Nursing, University of Arkansas for Medical Sciences
Central Arkansas Veterans Healthcare System Nursing Service
Sigma Theta Tau International Gamma XI Chapter
Arkansas Children’s Hospital
St. Vincent Infirmary
University of Arkansas for Medical Sciences Medical Center
Osmonetta Beard
College of Nursing University of Arkansas Medical Sciences
4301 West Markham Street, Slot 529
Little Rock, AR 72205
Office: 501.296.1040
Fax: 501.686.7591
E-mail: obeast@uams.edu

Sigma Theta Tau International Honor Society of Nursing Gamma Xi Chapter
http://nursing.uams.edu/gammaxi

Nurse Recruiter
Central Arkansas Veterans Healthcare System
Nurse Recruitment (118/LR)
4300 West 7th Street
Little Rock, Arkansas 72205 (501) 257-6153
Raymond.Wilson2@va.gov
Carol.Hampton2@va.gov
Cynthia.Dina@va.gov

Mitch Highfill
Nurse Recruiter
Arkansas Children’s Hospital
Children’s Way, Slot 607
Little Rock, AR 72202
Office: 501.364.1398
E-mail: highfillma@archildrens.org

Susan Erickson, RN, MNSc, BC-NA, CHCR Nurse Recruiter & Recruitment/Retention officer
University of Arkansas Medical Sciences
4301 West Markham Street, Slot 526
Little Rock, AR 72205
Office: 501.686.7144
Fax: 501.686.5698
E-mail: temple-erickson@uams.edu
# RESEARCH DAY 2014 PLANNING COMMITTEE

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Roles</th>
<th>Committee Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Arkansas for Medical Sciences, College of Nursing</td>
<td>• Conference Program Planning and Coordination • Abstract Review • Event Staffing • Registration Processes • Evaluation Analysis • Door Prize, Donations, Exhibitors</td>
<td>Ayasha Thomason, MNSc, APN, WHNP-BC Becky Patterson, PhD, RN, CPNP Beth Ann West, Administrative Analyst Bill Buron, PhD, RN, FNP/GNP-BC Ednarene Rodgers, Administrative Assistant II Lee Blackwood, Department Business Manager Mark Tanner, MNSc, BSN, RN; Karen Davis, MSN, RN Sara Jones, PhD, APRN, PMHNP-BC Seongkun Heo, PhD, RN, Research Day Chair Stacy Hoyle, MHSA, Assistant Dean for Administration Tamisha Henderson, MSN, MHA, RN, CCM; Tina Pettey, PhD, RN, FNP-BC, APRN Trisha Wright, PhD, MPH, RN UAMS CON Development Office</td>
</tr>
<tr>
<td>Central Arkansas Veterans Healthcare System Nursing Service</td>
<td>• Continuing Nursing Education (CNE) Provider • CNE evaluation forms and certificates • Conference Program Planning; Abstract Review</td>
<td>Charlotte Brunner, MNSc, RN, CCRN Michael Farruggia, PhD, RN Sheila Sullivan, PhD, RN</td>
</tr>
<tr>
<td>University of Arkansas for Medical Sciences, Medical Center</td>
<td>• Conference Program Planning • Abstract Review • Event Staffing • Financial Support</td>
<td>Tammy Jones, PhD, RNC Amy Hester, BSN, RN, BC</td>
</tr>
<tr>
<td>Arkansas Children’s Hospital</td>
<td>• Conference Program Planning • Abstract Review</td>
<td>Angela Green, PhD, APRN, RN, NNP-BC Amy C. Huett, PhD(c), RN Debra Jeffs, PhD, RN</td>
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<tr>
<td>Hartford center-Aging</td>
<td>• Conference Program Planning</td>
<td>Robin Mcatee, PhD, RN</td>
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<tr>
<td>St. Vincent hospital</td>
<td>• Conference Program Planning</td>
<td>Penny Sikes, BSN, RNP, OCN, RN Peggy Diaz, RN Debbie Campbell, RN</td>
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<tr>
<td>Sigma Theta Tau International—Gamma Xi Chapter</td>
<td>• Financial Support • Networking • Student Poster Awards</td>
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## RESEARCH DAY 2014: ABSTRACT REVIEWERS

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Amy Huett, PhD(c), RN</td>
<td>Karen Davis, MSN, RN</td>
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<td>Anita Mitchell, PhD, RN</td>
<td>Lana Brown, MNSc, RN</td>
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<td>Ayasha Thomason, MNSc, RN</td>
<td>Leanne Lefler, PhD, RN</td>
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<td>Barbara Pate, PhD, RN</td>
<td>Leonie Declerk, DNP, RN</td>
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<td>Becky Patterson, PhD, RN</td>
<td>Mark Tanner, MNSc, RN</td>
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<td>Beverly English, MNSc, RN</td>
<td>Matthew Hadley, DNP, RN</td>
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<td>Bill Buron, PhD, RNC</td>
<td>Melodee Harris, PhD, RN</td>
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<td>Charlotte Brunner, MNSc, RN</td>
<td>Neena Grissom, MSN, RN</td>
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<tr>
<td>Cheryl Schmidt, PhD, RN</td>
<td>Pao-Feng Tsai, PhD, RN</td>
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<tr>
<td>Claudia Barone, EdD, RN</td>
<td>Robin McaTee, Ph.D., R.N</td>
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<tr>
<td>Dona Dormam, MNSc, RN</td>
<td>Sandra Berryman, DNP, RN</td>
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<td>Donna Gullette, DSN, RN</td>
<td>Sara Jones, PhD, RN</td>
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<td>Fermin Renteria, MNSc, RN</td>
<td>Seongkum Heo, PhD, RN</td>
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<td>Heba Sadaka, MSN, RN</td>
<td>Sheila Sullivan, PhD, RN</td>
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<tr>
<td>Janet Rooker, MNSc, RNP</td>
<td>Susan Ball, PhD, RN</td>
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<tr>
<td>Jean McSweeney, PhD, RN</td>
<td>Tamisha Henderson, MSN, RN</td>
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<tr>
<td>Joy Jennings, MSN, RN</td>
<td>Tina Pett, PhD, RN</td>
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<tr>
<td>Julia Goodwin, PhD, RN</td>
<td>Trisha Wright, PhD, MPH, RN</td>
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<td>Keneshia Bryant, PhD, RN</td>
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ACKNOWLEDGEMENT FOR GREAT HELP AT THE EVENT

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>Becca Austin, RN</td>
<td>Kara Mincy, RN</td>
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<tr>
<td>Cheryl Washington, RN</td>
<td>Kaylee Sisoukrath, RN</td>
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<tr>
<td>Corey Giambalvo</td>
<td>Kimberly Scruggs</td>
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<tr>
<td>Deborah Johnson, RN</td>
<td>Lana Brown, RN</td>
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<td>Erin Bush, RN</td>
<td>LuAnh Tran, RN</td>
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<td>Gina Boshears, RN</td>
<td>Marie Patterson, RN</td>
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<td>Heather Alverson, RN</td>
<td>Matthew Hadley, DNP, RN</td>
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<tr>
<td>Janie Welsh</td>
<td>Sherry Oldner, RN</td>
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<td>Jeanette Minyard, RN</td>
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WELCOME TO RESEARCH DAY 2014!

This annual nursing conference has grown over the past few years and broadened its scope to include evidence-based practice, advanced nursing practice, nursing education, and staff development in a variety of nursing practice settings and academic nursing research.

Here are some tips for a more productive day:

• Please take time to review the activities scheduled for the day. Note that times and room numbers are listed on the detailed schedule of activities.
• There are four points in the day in which attendees have multiple concurrent options from which to choose. Review the titles listed on the detailed schedule and the abstracts (available online) to plan which you will attend.
  • Breakout Session I: A or B or C
  • Breakout Session II: D or E or F
  • Poster Session I (multiple rooms)
  • Poster Session II (multiple rooms)
• Rooms will present posters with common topics.
• Visit the exhibits to learn about career opportunities
• Network with others who have similar interests in nursing, nursing science, and evidence for practice. Consider noting contact information and/or abstract numbers for later use.
• Restrooms and the elevator are along the west side of the building. Stairs are in the middle of the building.
• Lunch will be served on both levels of the building for everyone’s convenience. Name badges are coded for the type of lunch requested.
• Contact Hour certificates will be awarded upon submission of completed evaluation forms and hours are based on hours of actual participation in the day’s activities. Those who cannot stay the whole day are welcome to request hours for the sessions attended.

CONTINUING NURSING EDUCATION CONTACT HOURS

At the completion of this conference, the participant will be able to:

• Describe techniques, methods, and strategies used in evidence-based practice.
• Discuss the utilization of nursing research based on current findings.
• Describe educational and clinical practice innovations and resources.

All program planners and presenters have signed Conflict of Interest forms, indicating that they have no financial relationships with commercial entities which produce or disseminate pharmaceutical or other patient-care products or devices, that they will not discuss off-label use of such products or devices, and will not endorse products of these entities. Any support from commercial entities will be provided in the form of unrestricted educational grants which will not influence the educational program. If provided, such commercial support will be announced during the opening session, and published in the program book.

By attending the entire program, nurses will earn 6.25 Continuing Nursing Education contact hours. In order to earn these hours, nurses must submit the completed evaluation form, which will be exchanged for a certificate of completion. Less contact hours may be earned by those who attend only part of the program.

Central Arkansas Veterans Healthcare System is an approved provider of continuing nursing education by Arkansas Nurses Association, an accredited approver by the American Nurses Credentialing Center’s COA.
**KEYNOTE SPEAKER**

The IOM Report on the Future of Nursing: Implications for Academics and Practice

VALLIRE D. HOOPER, PhD, RN, CPAN, FAAN
Manager, Nursing Research, Mission Health System, Asheville, North Carolina
Co-Editor of *Journal of Perianesthesia Nursing*

Dr. Hooper is a major leader and advocate for the promotion of safe, quality patient care in the acute care setting. Dr. Hooper’s research focuses on the development and translation of evidence-based guidelines to practice, and to patient outcome evaluation. She is recognized as an international and national expert in the field of perianesthesia/perioperative nursing, where she has provided leadership to several specialty organizations in the development of evidence-based standards and clinical practice guidelines. Outcomes from this work include a nationally recognized guideline for the prevention of perioperative hypothermia, which provides a foundational reference for national surgical normothermia quality measures.

She is co-editor of the *Journal of Perianesthesia Nursing*, and the author of numerous nursing textbook chapters and articles in both refereed and non-refereed journals. She has received significant funding as a research mentor, primary, and co-investigator to conduct projects that advance development and translation of evidence-based clinical practice and guidelines.

Dr. Hooper currently serves as the Manager of Nursing Research for Mercy Health System in Asheville, North Carolina where she is enthusiastic about the importance of nursing research and offers support and assistance to all nurses interested in becoming more familiar with conducting research studies or completing evidence-based practice projects.

She serves on several national level expert panels and advisory groups, including the Patient-Safety-Complications endorsement Maintenance Steering committee for the National Quality Forum.

Her work has earned her multiple awards, among these fellow of the American Academy of Nursing and recipient of the ASPAN Distinguished Service award of the Past President’s Council.
# Research Day 2014

**Friday, April 11, 2014**

<table>
<thead>
<tr>
<th>TIME</th>
<th>TOPIC</th>
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<tbody>
<tr>
<td>7:30 - 8:15AM</td>
<td>Registration and Continental Breakfast</td>
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<tr>
<td>8:15 - 8:30AM</td>
<td>Welcome/Introductions/Building Orientation</td>
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<tr>
<td>8:30 – 9:30AM</td>
<td><strong>Keynote Address</strong>&lt;br&gt;The IOM Report on the Future of Nursing: Implications for Academics and Practice&lt;br&gt;Vallire Hooper, RN, PhD, FAAN&lt;br&gt;Manager, Nursing Research; Mission Health System; Co-Editor of <em>Journal of PeriAnesthesia Nursing</em></td>
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<tr>
<td>9:30 – 10:30AM</td>
<td><strong>BREAKOUT SESSIONS I</strong>&lt;br&gt;Breakout Session I: Option A Room IDW 226&lt;br&gt;Have the Southern States Benefited from the Nurse Practitioner’s Education Program started in 1965?&lt;br&gt;Abstract #: 001&lt;br&gt;Thomas Kippenbrock&lt;br&gt;University of Arkansas&lt;br&gt;---&lt;br&gt;Breakout Session I: Option B Room IDW 126&lt;br&gt;The lived experience: How ED RNs resolve emotional pain after patient perpetrated workplace violence&lt;br&gt;Abstract #: 003&lt;br&gt;Wanda Christie&lt;br&gt;UAMS, CON&lt;br&gt;---&lt;br&gt;Breakout Session I: Option C Room IDW 115&lt;br&gt;Aromatherapy and Music Therapy for Patients Treated with Stem Cell Transplant&lt;br&gt;Abstract #: 004&lt;br&gt;Tamisha Gatewood-Henderson&lt;br&gt;UAMS, CON&lt;br&gt;---&lt;br&gt;<strong>CHG Baths to Decrease CLABSI</strong>&lt;br&gt;Abstract #: 022&lt;br&gt;Sherita Richardson&lt;br&gt;Central Arkansas Veterans Healthcare System&lt;br&gt;---&lt;br&gt;<strong>Coordinating Care through Multidisciplinary Team Rounding</strong>&lt;br&gt;Abstract #: 023&lt;br&gt;Susan Brown&lt;br&gt;Arkansas Children's Hospital&lt;br&gt;---&lt;br&gt;<strong>Effectiveness of fall prevention interventions</strong>&lt;br&gt;Abstract #: 025&lt;br&gt;Lucy Amber Cyphers&lt;br&gt;University of Tennessee Health Science Center, CON&lt;br&gt;---</td>
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<tr>
<td>10:30 – 10:45AM</td>
<td>Break</td>
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<tr>
<td>10:45 - 12:00PM</td>
<td><strong>Poster Session I: IDW Rooms 214, 213, 206, 115, 106, 105, and 2nd Foyer</strong></td>
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<tr>
<td>12:00 – 1:00PM</td>
<td>Lunch <em>(provided for all pre-registrants. Refer to color on name badge.)</em></td>
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<td>1:00 – 2:15PM</td>
<td>Poster Session II: IDW Rooms 214, 213, 206, 115, 106, 105, and Foyer</td>
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<td>2:15 - 2:30PM</td>
<td>Break</td>
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<td>2:30 – 3:30PM</td>
<td><strong>BREAKOUT SESSIONS II</strong></td>
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<td>Breakout Session II: Option D</td>
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<td>Room IDW 226</td>
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<tr>
<td></td>
<td>Perceptions of the Causes and Treatment of Hypertension among Poor Southern African Americans</td>
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<td>Abstract #: 032</td>
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<td></td>
<td>Christina M. Pettey</td>
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<td>Breakout Session II: Option E</td>
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<td></td>
<td>Room IDW 126</td>
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<td></td>
<td>Nursing Students’ Perceptions Of Stress-Producing Experiences: A Hermeneutic Phenomenological Study</td>
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<td></td>
<td>Abstract #: 005</td>
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<td></td>
<td>Constance Hall</td>
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<td>Jefferson Regional Medical Center [JRMC], School of Nursing</td>
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<td>Breakout Session II: Option F</td>
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<td></td>
<td>Room IDW 115</td>
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<td></td>
<td>Appropriate and Safe Nipple Selection for Infants in the NICU based on Flow Rate for Post Discharge Use</td>
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<td>Abstract #: 008</td>
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<td>Carol Anne Tumlison</td>
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<td>Salt Restrictions and Heart Failure</td>
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<td>Abstract #: 015</td>
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<td></td>
<td>Sheila Cox Sullivan</td>
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<td>Sue A. Theus</td>
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<td>VA hospital</td>
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<td></td>
<td>Benefits of APN Coverage on Post-operative Spine Patients Related to Length of Stay</td>
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<td></td>
<td>Abstract #: 034</td>
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<td></td>
<td>Wanda Lusk</td>
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<td></td>
<td>St. Vincent Hospital</td>
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<tr>
<td>3:40 – 4:00PM</td>
<td>Submit Evaluations; Pick Up Contact Hours Certificates, Door Prizes!</td>
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<tr>
<td>Abstract #</td>
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<tr>
<td>002</td>
<td>Compassion Fatigue in Healthcare Workers</td>
</tr>
<tr>
<td>014</td>
<td>Learning Styles, Cost, Staff Preferences, and CPR: An Evidence-Based Leadership Decision</td>
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<tr>
<td>056</td>
<td>Hospitals benefit from offering graduate nursing residency programs</td>
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<td>058</td>
<td>Direct Care Nurse Staffing</td>
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<tr>
<td>101</td>
<td>Relationship of Bar Code Administration VS. Non-Barcode Medication Administration in Reducing Medication Errors</td>
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<tr>
<td>106</td>
<td>Interventions to Improve Blood Pressure Control in African Americans</td>
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<td>110</td>
<td>Elder Abuse</td>
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<td>111</td>
<td>Impact of Military Life and the Elderly Veterans of War</td>
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<tr>
<td>112</td>
<td>Evaluating the Effectiveness of Katz-Index of Independence in Activities of Daily Living</td>
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<tr>
<td>114</td>
<td>Pain and Dementia: An Analysis of Effective Pain Management in Elderly Patients with Decreased Cognitive Function</td>
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<tr>
<td>116</td>
<td>Assessing family preferences for participating the care of the hospitalized older adults</td>
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<tr>
<td>121</td>
<td>Evidence for Causes and Prevention of Medication Errors Caused by Nursing Staff in the Hospital</td>
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*Leave posters in place until 2:15pm*
<table>
<thead>
<tr>
<th>Abstract #</th>
<th>Title</th>
<th>Primary Author</th>
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<tbody>
<tr>
<td>064</td>
<td>Prophylactic Antibiotics for High Risk Neutropenic Cancer Patients</td>
<td>Ebony Thompson</td>
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<td>UAMS</td>
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<tr>
<td>093</td>
<td>The attitudes, perceptions, and knowledge of nurses and nursing students caring for HIV/AIDS patients</td>
<td>Olivia Milstead</td>
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<td>University of Arkansas at Monticello</td>
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<tr>
<td>094</td>
<td>Tobacco Use of Third Year BSN Students in Arkansas Using the Global Health Professions Student Survey</td>
<td>Pamela DeGravelles</td>
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<td>UAMS, southern Arkansas University</td>
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<tr>
<td>104</td>
<td>Review of Literature: HARP</td>
<td>Savannah Quintana</td>
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<tr>
<td>107</td>
<td>Predictors of Longevity: Live a Long and Healthy Life</td>
<td>Solena Rogers</td>
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<td>Southern Arkansas University</td>
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## POSTER SESSION I (10:45AM-12:00PM)
### ROOM 206
( I. Dodd Wilson Education Building, Second Floor)

<table>
<thead>
<tr>
<th>Abstract #</th>
<th>Title</th>
<th>Primary Author</th>
<th>Affiliation</th>
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</thead>
<tbody>
<tr>
<td>076</td>
<td>Depression and End Stage Renal Disease, A Case Study</td>
<td>Kerry Murphree</td>
<td>UAMS</td>
</tr>
<tr>
<td>078</td>
<td>Loneliness In the Elderly</td>
<td>LaDonna Marie Young</td>
<td>Magnolia Regional Medical Center Clerk</td>
</tr>
<tr>
<td>080</td>
<td>Restraint Free Care: Chemical and Physical</td>
<td>Landon Stuart</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>083</td>
<td>Evidence for The Effectiveness of Modifying the Geriatric Depression Scale</td>
<td>LaWanda Harris</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>105</td>
<td>Posttraumatic Stress Disorder in the Elderly</td>
<td>Shemeka Martin</td>
<td>Southern Arkansas University</td>
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</tbody>
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## POSTER SESSION I (10:45AM-12:00PM)
### Second Floor Foyer
( I. Dodd Wilson Education Building, Second Floor)

<table>
<thead>
<tr>
<th>Abstract #</th>
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<th>Primary Author</th>
<th>Affiliation</th>
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</thead>
<tbody>
<tr>
<td>020</td>
<td>Burn Center Nursing Case Conference: Identifying Problems and Developing Solutions</td>
<td>Regina Welch</td>
<td>Arkansas Children's Hospital</td>
</tr>
<tr>
<td>021</td>
<td>Safe is Smart: Pediatric Burn Prevention Education</td>
<td>Amber Files</td>
<td>Arkansas Children's Hospital</td>
</tr>
<tr>
<td>068</td>
<td>How older people spend time, make connections, and build communities</td>
<td>Jamie Martin</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>069</td>
<td>Considerations on Erectile Dysfunction and the Aging Male in Nursing Practice: Abstract Submission: Review of Literature</td>
<td>Jessica Zigler</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>071</td>
<td>Homelessness in the Elderly</td>
<td>Jordan Joyce</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>086</td>
<td>Evidence Based Practices for Diagnostic and Treatment of Blastomycosis: A Case Study</td>
<td>Manuel Heredia</td>
<td>UAMS, CON</td>
</tr>
<tr>
<td>087</td>
<td>Diagnosis and Treatment of Diverticular Abscess: A Case Study</td>
<td>Marina Henry</td>
<td>UAMS</td>
</tr>
<tr>
<td>089</td>
<td>Global Aging</td>
<td>Matthew White</td>
<td>Southern Arkansas University</td>
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<tr>
<td>095</td>
<td>Models of Long-Term Care</td>
<td>Olivia Tate</td>
<td>Southern Arkansas University</td>
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<tr>
<td>098</td>
<td>Effects of Different Contraceptives in Treating Pain Associated with Endometriosis</td>
<td>RayDawn Henthorn</td>
<td>Henderson State University</td>
</tr>
<tr>
<td>118</td>
<td>The Impact of the OIF/OEF Wars on the Children of Our Deployed Military Personnel</td>
<td>Amber Marts</td>
<td>UAMS</td>
</tr>
<tr>
<td>119</td>
<td>Using the Transitional Care Model for Improving Geriatric Patient Care</td>
<td>Melissa Tridico</td>
<td>Southern Arkansas University</td>
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*Leave posters in place until 2:15pm*
# POSTER SESSION I (10:45AM-12:00PM)
**ROOM 115**
*(I. Dodd Wilson Education Building, First Floor)*

<table>
<thead>
<tr>
<th>Abstract #</th>
<th>Title</th>
<th>Primary Author</th>
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<tbody>
<tr>
<td>009</td>
<td>Thermoregulation in Perioperative Services</td>
<td>Carolyn Martin</td>
<td>Arkansas Children’s Hospital</td>
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<td>018</td>
<td>Hypodermoclysis: A different vein in hydration</td>
<td>Sue Ragsdale</td>
<td>Central Arkansas Veterans Healthcare System</td>
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<td>044</td>
<td>Euthanasia and Physician Assisted Suicide: Attitudes of Various Populations</td>
<td>Carson Corbell</td>
<td>Southern Arkansas University</td>
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<tr>
<td>055</td>
<td>Literature Review: Peripheral IV Access Teams in Hospital Settings</td>
<td>Deborah Johnson</td>
<td>UAMS</td>
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<tr>
<td>070</td>
<td>Care of the Caregiver: A Review of the Tools Used to Assess Caregiver Role Strain</td>
<td>Johanna Hensley</td>
<td>Southern Arkansas University</td>
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<td>072</td>
<td>Substance Abuse in the Elderly</td>
<td>Kayla Pride</td>
<td>Southern Arkansas University</td>
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<tr>
<td>077</td>
<td>Use of Epidural Steroid Injections for a Herniated Lumbar Disk: A Case Study</td>
<td>Kristine Rowland</td>
<td>UAMS</td>
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<td>082</td>
<td>Effective Transition of Elderly to Residential Housing Options</td>
<td>Lauren McCloy</td>
<td>Southern Arkansas University</td>
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<tr>
<td>006</td>
<td>The Charge Nurse Role: An Evidence Based Approach</td>
<td>Taryn J. Bailey</td>
<td>Central Arkansas Veterans Healthcare System</td>
</tr>
<tr>
<td>007</td>
<td>ABLS Provider Course via Telemedicine</td>
<td>Tiffany Teague</td>
<td>Arkansas Children's Hospital</td>
</tr>
<tr>
<td>019</td>
<td>Learner’s Perception of Simulation: An evaluation</td>
<td>Lana St. Clair</td>
<td>St. Vincent Infirmary</td>
</tr>
<tr>
<td>038</td>
<td>Keys to Student Success in a Nursing Program and First Time Pass Rate on the NCLEX-RN Examination</td>
<td>Becky Parnell</td>
<td>UAMS, Southern Arkansas University</td>
</tr>
<tr>
<td>075</td>
<td>Cost-Benefit of Employing a Clinical Nurse Leader on a Medical Surgical Unit in Arkansas</td>
<td>Kerry Jordan</td>
<td>UAMS</td>
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<tr>
<td>011</td>
<td>Current Recommendations Regarding Hypoglycemia in Diabetic Geriatric Patients</td>
<td>Kara Mincy</td>
<td>UAMS</td>
</tr>
<tr>
<td>048</td>
<td>Interventions to Promote Diabetes Regimen Adherence</td>
<td>Cheryl Wells</td>
<td>University of Arkansas at Monticello</td>
</tr>
<tr>
<td>073</td>
<td>In Patients Receiving Insulin, Does Subcutaneous Injection in the Abdomen Compared to the Anterior Thigh &amp; Upper Arm Lead to Faster Absorption Rates?</td>
<td>Kelly Cox</td>
<td>Henderson State University</td>
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<tr>
<td>099</td>
<td>Therapeutic Compliance among the Elderly</td>
<td>Robbie Portmann</td>
<td>Southern Arkansas University</td>
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<tr>
<td>100</td>
<td>Prescription Medication Use Among Self Neglecting Elderly</td>
<td>Rodneshia McClellan</td>
<td>Southern Arkansas University</td>
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Poster Session II
(1:00PM-2:15PM)
### POSTER SESSION II (1:00PM-2:15PM)
#### ROOM 214
(1. Dodd Wilson Education Building, Second Floor)

<table>
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<th>Abstract #</th>
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<tr>
<td>016</td>
<td>The impact of in-the field EKG on ST-Segment Elevation Myocardial Infarction (STEMI) Care and Outcomes</td>
<td>Deborah Meiklejohn</td>
<td>St Vincent Infirmary Medical</td>
</tr>
<tr>
<td>017</td>
<td>Reducing CHF Readmissions Using Telehealth</td>
<td>Donna J. Ussery</td>
<td>UAMS</td>
</tr>
<tr>
<td>043</td>
<td>Treatment of Acute Respiratory Distress Syndrome- a Case Review</td>
<td>Brooke Steimel</td>
<td>UAMS</td>
</tr>
<tr>
<td>052</td>
<td>Diagnosis and treatment of right cavitary lung lesion: A nocardia case study</td>
<td>Davon Lackie</td>
<td>UAMS, CON</td>
</tr>
<tr>
<td>054</td>
<td>The Challenge of Diagnosing and Treatment of Low Risk Chest Pain: A Case Study</td>
<td>Debbie Evans</td>
<td>UAMS</td>
</tr>
<tr>
<td>057</td>
<td>Automatic versus Manual Blood Pressure cuffs; does it matter?</td>
<td>Amanda Erwine</td>
<td>Henderson State University</td>
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<tr>
<td>062</td>
<td>Pacemaker Indications: A Case Study</td>
<td>Ellen Shadwick</td>
<td>UAMS</td>
</tr>
<tr>
<td>090</td>
<td>Treatment of Pulmonary Embolism in an Older Adult: A Case Study</td>
<td>Melissa Worm</td>
<td>UAMS, CON and St. Vincent</td>
</tr>
<tr>
<td>096</td>
<td>Fusobacterium Pneumonia in Immunocompetent Host, a Challenging Diagnosis Associated with Life-Threatening Complications.</td>
<td>Patricia Lopez</td>
<td>UAMS, CON</td>
</tr>
<tr>
<td>102</td>
<td>Diagnosis and Treatment of an Empyema: A Case Study</td>
<td>Sam Raney</td>
<td>UAMS</td>
</tr>
<tr>
<td>115</td>
<td>Comparison of Tools in Assessing Cancer-Related Fatigue</td>
<td>Jessica Bryant</td>
<td>University of Arkansas in Monticello</td>
</tr>
<tr>
<td>120</td>
<td>Factors Effecting Parental Refusal or Delay of Childhood Immunizations</td>
<td>Justin Starr, Charlie Carr, C.J. M University of Arkansas in Monticello organ, Tara Crim</td>
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### POSTER SESSION II (1:00PM-2:15PM)
**ROOM 213**
(I. Dodd Wilson Education Building, Second Floor)

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<tr>
<td>024</td>
<td>Mucositis Prevention in the High Dose Melphalan Patient</td>
<td>Ginger Hart</td>
<td>UAMS</td>
</tr>
<tr>
<td>029</td>
<td>Sleep Disturbance and Medications as Fall Risks</td>
<td>Carol Enderlin</td>
<td>UAMS, CON</td>
</tr>
<tr>
<td>061</td>
<td>Patients’ Perception Towards Nurses with Visible Body Modifications</td>
<td>Dylan Stokes</td>
<td>Henderson State University</td>
</tr>
<tr>
<td>108</td>
<td>Improving Sleep Quality in the Elderly using Adjunct Therapies</td>
<td>Sondra Howard</td>
<td>Southern Arkansas University - Magnolia</td>
</tr>
<tr>
<td>109</td>
<td>Health Benefits of Volunteering Among Older Adults</td>
<td>Sun Young Lee</td>
<td>Southern Arkansas University</td>
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<td>033</td>
<td>Childhood Sexual Trauma in Female American Indian / Alaskan Natives</td>
<td>Jessica L. Fowler</td>
<td>UAMS</td>
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<tr>
<td>067</td>
<td>Relationship of childhood sexual abuse to substance abuse in adolescence or adulthood</td>
<td>James Weidel</td>
<td>UAMS</td>
</tr>
<tr>
<td>091</td>
<td>The Importance of Perceiving Support in Victims of Childhood Abuse</td>
<td>Michael Siegler</td>
<td>UAMS</td>
</tr>
<tr>
<td>097</td>
<td>Evaluating the Validity and Reliability of the Katz IADL Geriatric Scale</td>
<td>Raul Quintana</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>117</td>
<td>Cultural Influences Regarding Immunizations of Older Adults</td>
<td>Ashley Jaggers</td>
<td>Southern Arkansas University</td>
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<tr>
<td>037</td>
<td>Functional Decline in Older Adults During Hospitalization</td>
<td>Ashley Childs</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>047</td>
<td>Elder Abuse</td>
<td>Chelsey May</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>051</td>
<td>The Impact of Diversity on the Care of Older Adults</td>
<td>Danielle Christine Iverson</td>
<td>Magnolia Regional Medical Center Clerk</td>
</tr>
<tr>
<td>059</td>
<td>Older African Americans and Planning for the End of Life:</td>
<td>Donna Elrod</td>
<td>UAMS</td>
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<td>Exploring the Influence of Trust in the Health Care System</td>
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<td>065</td>
<td>Hearing Aid Use and the Elderly</td>
<td>Haley Quintana</td>
<td>Southern Arkansas University</td>
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<td>066</td>
<td>Review of Literature on Articles Related to the Impact of Using</td>
<td>Heidi Hensel</td>
<td>Southern Arkansas University</td>
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<td>Assistive Devices for the Older Adult with Vision Impairment</td>
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<td>079</td>
<td>Tobacco Cessation in Older Adults: A Qualitative Study</td>
<td>Lana Brown</td>
<td>UAMS</td>
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<tr>
<td>081</td>
<td>Benefits of Exercise in the Elderly</td>
<td>Laura Hayes</td>
<td>Southern Arkansas University, Magnolia</td>
</tr>
<tr>
<td>088</td>
<td>Treatment with Dual Therapy for Relapse Case of Hepatitis C</td>
<td>MaShelia Broadway</td>
<td>UAMS</td>
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<tr>
<td>092</td>
<td>Sleep Patterns of Undergraduate College Students</td>
<td>Michelle Taylor</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>103</td>
<td>Effects of Tai Chi on the Gerontological Population</td>
<td>Sarah Emerson</td>
<td>Southern Arkansas University</td>
</tr>
<tr>
<td>113</td>
<td>Factors Contributing to Women’s Decision for and Their Experiences</td>
<td>Boyd Brooke</td>
<td>University of Arkansas in Monticello</td>
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<tr>
<td>010</td>
<td>Taking the Fall for Kids: Implementation of a Falls Bundle to Increase Patient Safety</td>
<td>Tammy Webb Arkansas Children's Hospital</td>
</tr>
<tr>
<td>013</td>
<td>Let the Children Come to Me: Visitation on an Inpatient Mental Health Unit</td>
<td>Jenifer Booth Newton Central Arkansas Veterans Healthcare System</td>
</tr>
<tr>
<td>039</td>
<td>Breastfeeding vs. Bottlefeeding</td>
<td>Bradley Williams Henderson State University</td>
</tr>
<tr>
<td>045</td>
<td>Patient and Family Centered Care in Action: The UAMS NICU Sibling Support Program</td>
<td>Catherine Brown UAMS</td>
</tr>
<tr>
<td>063</td>
<td>“Feeding a “Sleeping Gut” after Cesarean Section: an Evidence-Based Practice Literature Review”</td>
<td>Erin Bush UAMS, Southern Arkansas University</td>
</tr>
<tr>
<td>074</td>
<td>Will a multimodal approach with orthopedic total joint arthorplasty patients decrease pain as compared to traditional PCA pain management?</td>
<td>Kaylee Sisoukrath UAMS</td>
</tr>
<tr>
<td>084</td>
<td>Bullying and Victimization of Obese Children in School Settings</td>
<td>Liz Walker UAMS</td>
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<td>085</td>
<td>Low birth weight in maternal smoking</td>
<td>Macy McMillan Henderson State University</td>
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## POSTER SESSION II (1:00PM-2:15PM)
### ROOM 106
( I. Dodd Wilson Education Building, First Floor)

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<th>Abstract #</th>
<th>Title</th>
<th>Primary Author</th>
<th>Affiliation</th>
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<tr>
<td>035</td>
<td>Literature Review: Patient Factors Associated with Injurious Falls</td>
<td>Amy Hester</td>
<td>UAMS</td>
</tr>
<tr>
<td>036</td>
<td>Falls and Older Adults</td>
<td>Andrew Sexton</td>
<td>Southern Arkansas University</td>
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<tr>
<td>049</td>
<td>Nursing Competences for Geriatric Care</td>
<td>Clair Roden</td>
<td>Southern Arkansas University</td>
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<td>050</td>
<td>Physical Abuse and Neglect of Elders in the Context of Family</td>
<td>Connie Brown</td>
<td>UAMS</td>
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<tr>
<td>053</td>
<td>The Effect of Storytelling and Geriatric Clients</td>
<td>Deanna Sirmans</td>
<td>Southern Arkansas University</td>
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<tr>
<td>012</td>
<td>Adverse drug events (ADEs) in nursing homes: A literature review</td>
<td>Monica L. Tenhunen</td>
<td>Texas A&amp;M University-Commerce</td>
</tr>
<tr>
<td>040</td>
<td>Alcohol Abuse and the Elderly Population</td>
<td>Brandon Henderson</td>
<td>Southern Arkansas University</td>
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<tr>
<td>041</td>
<td>Evaluating the Effectiveness of Cognitive Impairment Assessment Tools</td>
<td>Brandy Nash</td>
<td>Southern Arkansas University</td>
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<tr>
<td>042</td>
<td>Sexuality in the Elderly</td>
<td>Bretta Montgomery</td>
<td>Southern Arkansas University</td>
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<td>046</td>
<td>Baby Boomer’s</td>
<td>Chad Atchley</td>
<td>Southern Arkansas University</td>
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Podium Presentations
Have the Southern States Benefited from the Nurse Practitioner’s Education Program started in 1965?

Thomas Kippenbrock, EdD, RN; Ellen Odell, DNP, Wen-Jup Lo, PhD
University of Arkansas

**Background:** Ford and Silver (1967) believed nurses could be educated to deliver primary care in Colorado underserved areas; thus the concept and development of advanced practice nursing began at the University of Colorado. The first nurse practitioner program in the United States was conceived in 1965. Currently there are 5,703 primary care health professional shortage areas (HPSAs) nationally and 1,567 in the 11 southern states. Furthermore, there are 7,138 practitioners needed nationally and 2,618 in the south for these HPSAs.

**Purpose:** To investigate the distribution of nurse practitioners (NPs) in the U.S. Southern region with a close focus on the rural and underserved areas. Described in this study are the workforce distribution, characteristics, and likelihood of the NPs to practice in southern communities.

**Method:** The research design used was a non-experimental quantitative survey technique. A questionnaire was administered to nurse practitioners in 11 southern states. Other data sources included the Health Resources and Services Administration which identified health professional shortage areas and data from the U.S. Census Bureau to distinguish urban and rural areas.

**Results:** Descriptive statistics were used to summarize the NPs’ characteristics and chi squares to test observed and expected distribution. 1,765 NPs from 11 southern states responded to the online survey. The workforce findings of NPs working in the southern states were approximately 28% of NPs worked in shortage areas and less than half of the NPs worked in the rural area. Family nurse practitioners (FNPs) were more likely to practice in rural and shortage areas when compared to specialty NP. Employment in primary care was more likely to occur in rural and shortage areas. Racial diversity was almost non-existent within the NP population.

**Conclusions:** NP are an integrated component of primary care in rural and HPSAs in the southern states. As providers of quality, lower-cost alternative care, NPs are in an excellent position to meet the growing demand for primary care providers. Further study of these practices will likely lead to the ongoing identification of how NPs might best be utilized in the future era of healthcare reform. Without further study, the potential of NPs to positively influence a very vulnerable primary care system, as well as the underserved population, may never be realized.

**Implications:** A larger randomized sample size, which perhaps may capture more racial diversity in NPs, could investigate healthcare disparities in minority populations. An alternative solution to the ongoing emphasis on medical training in primary care is expanding investments in NP education and roles in primary care practice.
The lived experience: How ED RNs resolve emotional pain after patient perpetrated workplace violence

Wanda Christie, MNSc, RN, PhD (c)
University of Arkansas for Medical Sciences, College of Nursing

**Background:** Emergency nursing has been found to be a high risk profession for patient-perpetrated violence. Workplace violence (WPV) is defined by the American Nurses Association (ANA) as any physical assault, behavior that threatens, or verbal abuse that occurs in the workplace and the ANA stated that WPV decreased nurse job satisfaction and retention. Close to half of the registered nurses (RN) who experienced WPV thought about or left the nursing profession after violence. The resolution of negative feelings of nurses after experiencing patient perpetrated WPV has not been studied, but positive feelings could keep nurses from leaving the profession.

**Aim:** The aim of the study was for ED RNs to describe their thoughts, feelings, and coping behaviors after experiencing patient perpetrated WPV in order to determine the effectiveness of their current mechanisms used in resolving negative feelings after the incidents.

**Method:** The theory of the Nurse as Wounded Healer was used as the sensitizing framework of the study. Descriptive phenomenology was used to explore the lived experience of the ED RN who had experienced patient perpetrated WPV within the last 24 months. After receiving IRB approval, 13 ED RNs who met the guidelines were recruited using purposive sampling at a level one trauma center in the southeastern United States. Semi-structured interviews were audio-taped and transcribed verbatim with content analysis and constant comparison used to identify codes and themes.

**Results:** Four themes were identified: Feelings, Working in the ED, Changes, and Coping. Feelings exposed the nurses’ emotions related to the violence. Working in the ED disclosed thoughts about aspects of the work environment. Changes divulged thoughts about personal changes in nurses or planned changes related to ED violence. Coping disclosed the nurses’ mechanisms of both effective and ineffective resolution of feelings. Nurses related negative feelings such as sadness, crying, anger, and helplessness. They also related distancing themselves emotionally from patients and environment. The nurses’ perceptions of peer support were good. They saw positive and negative changes in themselves and in their work.

**Conclusions:** More research is needed to assist RNs to find methods for positive resolution of negative emotions after experiencing patient perpetrated WPV.

**Implications for Nursing:** As the nursing shortage continues, it becomes even more essential for nurses to remain active in the profession. By exploring what the ED RNs described related to their experiences after being subjected to patient perpetrated WPV, it becomes more apparent what they report as positive and negative interactions that can be intervened upon. The interventions considered could be tailored to include a quick debriefing after the incident, team building in the workplace, visible management support after an incident, continued support if the nurse requires after the immediate support, and posting signage in the workplace visible to all patients that there is a zero tolerance against WPV at the facility along with clear policy and guidelines for the nurses to follow after an incident occurs.
# Aromatherapy and Music Therapy for Patients Treated with Stem Cell Transplant

Tamisha Gatewood-Henderson, MSN, RN,CCM, MHA; Ebony Thompson, BSN, RN

1University of Arkansas for Medical Sciences College of Nursing; 2University of Arkansas for Medical Sciences

**Significance:** Stem cell transplantation is a cancer treatment that can be painful and very stressful. The preparatory high doses of chemotherapy coupled with the transplant side effects often have physiological and psychological effects. Some patients will use pharmacologic therapy to reduce symptoms; however, these medications may cause side effects as well. As a result, patients receiving stem cell transplant often seek out other ways of soothing the stem cell transplant side effects. Some patients have found that complementary and alternative therapies have greatly decreased symptoms, but healthcare professionals may lack knowledge or experience about the effectiveness of therapies such as aromatherapy and music therapy.

**Purpose (or Problem):** The purpose of this literature review was to gather evidence about the use of aromatherapy and music therapy on stem cell transplant patient.

**PICO Format Question:** For patients undergoing stem cell transplants, does the use of aromatherapy and music therapy compared with conventional pharmacological therapy decrease side effects of chemotherapy and stem cell transplantation side effects?

**Search Strategy and Quality Screening:** The literature search process used EBSCO, Ovid, PubMed, Google Scholar, and Trip Database with the following search terms: aromatherapy, music therapy, stem cell stem cell transplantation, anxiety, anxiety, plant oils, nausea, and administration inhalation. Although search years were unlimited, we limited the search to full text, human subjects, English language, complementary and alternative medical journals, cancer journals and nursing journals. We included bone marrow transplants as well stem cell transplants.

**Evidence:** The search initially revealed 16590 articles, however limiting the results to full text and English nursing journals, significantly decreased the number of results to 265. Eliminating studies that pertained to use of only one of the two interventions produced 13 studies for appraisal.

**Synthesis of Evidence:** The examined articles indicate that patients have benefited from the use of aromatherapy and music therapy during or after stem cell transplantation or chemotherapy. Both music therapy and aromatherapy decreased pain levels; moreover, music therapy also decreased patient anxiety and stress, whereas aromatherapy also decreased nausea and vomiting.

**Conclusions and Recommendations:** Overall, the evidence from the reviewed studies shows benefits from these interventions being as good as traditional pharmacological. Research about the use of aromatherapy and music therapy among patients with cancer is needed to determine which patients are most likely to benefit and the most effective dose and duration for these therapies.

**Implications for Nursing Practice:** Clinic and bedside nurses are well-positioned to discuss the use of aromatherapy and/or music therapy as care for side effects of chemotherapy and stem cell transplantation side effects while ensuring a culturally sensitive and nonjudgmental environment. Nurses must recognize that a quick dismissal may shut down further communication; whereas, open communication an informal dialogue about conventional therapy options and CAM may be helpful. Familiarity with professional and popular education resources and recognition that clients are important sources of information will help nurses understand helpful CAM interventions for patients.
## Abstract

### Nursing Students’ Perceptions Of Stress-Producing Experiences: A Hermeneutic Phenomenological Study

Constance Hall Ed.D. /C.I., M.S.N., B.A., R.N  
Jefferson Regional Medical Center, School of Nursing

**Background:** Students’ perceptions of their educational experiences are unique (Billings & Halstead, 2005; Walton, 2002). Therefore, the significance placed on every event during learning depends on the student and the perceived threats to his or her well-being. Part of the responsibility of educators is to respond to student distress by developing and providing support services to meet students’ needs. The current study is important because nursing educators and researchers may gain information regarding students’ perceptions of theoretical and clinical stress-producing experiences. By understanding and comprehending these perceptions, educators can guide planning, implementing, and evaluating educational approaches that lead to increased student success.

**Purpose:** The purpose of this qualitative, hermeneutic phenomenological study was to explore and describe nursing students’ perceptions of experiences that caused stress and anxiety in their nursing program.

**Method:** This study is a qualitative, hermeneutic, phenomenological design. A qualitative design was chosen to capture meanings of the lived experiences of nursing students who are enrolled in the school of nursing. Participants are expected to provide their perceptions of stress producing experiences in the nursing program and the subsequent effects on their physiological, psychological, and environmental well-being by answering open-ended interview questions. In using phenomenological research, the research question is asked: What is the essence of the stress phenomenon experienced by nursing students and what does it mean? Students were given an informed consent form to sign prior to the start of the interviews. Forty-five minute semi structured interviews were used in the research. Moustakas’s (1994) modified Stevick-Colaizzi-Keen method was selected as an appropriate method for analyzing the phenomenological data. NVivo software was used to assist in the process of describing, classifying, and interpreting the data; developing codes; and sorting the text into categories (Creswell, 2007).

**Results:** The data were examined through using Moustakas’ modified Stevick-Colaizzi-Keen approach to phenomenological analysis. The analysis resulted in five major themes regarding the participant’s perceptions of stress and anxiety while in a nursing program: (a) students experience stress and anxiety in the clinical setting, (b) students experience stress and anxiety in the classroom and skills lab, (c) students experience stress and anxiety because of inadequate financial resources, (d) mentoring and support from faculty reduce students’ perceived stress and anxiety, and (e) students apply various methods to cope with stress. The results of the study show that nursing students experience stress in the clinical setting, classroom, and skills lab; additionally, nursing students apply various methods to manage their stress, and students perceive reduced stress when faculty provide mentoring and support.

**Conclusions:** The results of this study indicate nursing education is a time of “increased stress that cause[s] extreme anxiety and a feeling of wanting to disappear during clinical or class when feeling inadequate as a student.” Stress and anxiety disrupted participants’ performance in the program as well as the participants’ personal lives. The participants recognized that they must either “adapt to the stress” or “let the stress take them down.”
## Appropriate and Safe Nipple Selection for Infants in the NICU based on Flow Rate for Post Discharge Use

Carol Anne Tumlison, MS, CCC-SLP, Jackie Davis, MS, CCC-SLP, and Rebecca P Sartini, MSN, RNC-NIC  
UAMS NICU

### Problem and Purpose:
The disposable hospital slow flow nipples used in the NICU are not available in commercial stores, making them not available to NICU families after discharge. Commercial slow flow nipples are variable by brand in flow rates, making it difficult to recommend nipples in acute care and after discharge, potentially increasing the risk for aspiration. There is a lack of evidence regarding the varying flow rates of commercial nipples versus disposable nipples with both breast milk and formula and the overall effect on feeding outcomes. The purpose of this study is to ascertain the average flow rate of a variety of readily available slow flow nipples to assist clinicians with determining the most appropriate nipple in order to provide guidance to parents on which commercial nipple options are available after discharge. This will promote continuity of care between hospital stay and the transition home while promoting safe feeding practices by decreasing the risk of aspiration in this high risk population.

### PICO Format Question:
In the NICU population, does the use of a nipple with an appropriate flow rate, as opposed to randomly recommending commercial slow flow nipples, improve consistency in recommendations for safe feeding practice during the NICU stay and for post discharge use.

### EBP Model/Process:
UAMS EBP model

### Relevant Literature:
Current literature supports that flow rate has an effect on safety and efficiency with oral feeds. It is widely documented that flow rate is a factor in safe feeding; however, there is limited research on the variability of nipples labeled slow flow. The current literature reveals that cue based feeding supports oral feeding development and safe swallow function while maintaining and meeting their nutritional needs.

### Method:
Commonly used commercial nipples were chosen for investigation, as well as the hospital slow flow product. Each nipple type will be tested using a Medela Symphony Breast Pump 2.0 set at the suction rate of 150mm Hg to simulate the sucking action of an infant. The infant nutritionals to be tested include: 20 kcal donor breast milk, 20 kcal formula, 22 kcal formula, and 24 kcal formula at room temperature. The exact amount of liquid transferred from the nipple to the collection bottle from this consistent pumping method will be recorded after 1 minute duration. All nipples will be tested for 3 pumping sessions and data gleaned from the average of the total amount will be documented for comparison.

### Outcomes and Conclusions:
- Liquid medium did not have an impact on flow rate
- No significant measurable difference between DBM, 20 calorie, and 22 calorie formula
- Broad spectrum of “slow” flow rates between brand names
- Variable flow rates between single disposable nipples
- No significant difference between standard versus wide based nipples
- Significant difference between orthodontic versus straight nipples
- Continuum supported Speech Pathology’s current clinical practice at UAMS

Results are currently implemented in direct patient care

### Implications for Nursing Practice:
Implications for nursing practice include enhancing autonomy for nursing through an evidence based approach to safe feeding of high-risk infants, feeding progression, ultimately optimal feeding outcomes. With appropriate multidisciplinary feeding recommendations, nursing can provide and support optimal feeding practices leading to improved parental education promoting continuity of care after discharge.
**Salt Restrictions and Heart Failure**

Sheila Cox Sullivan, PhD RN; Sue A. Theus, PhD
CAVHS

**Background:** Standard care for patients with heart failure is a sodium restriction of no more than 2000 mg of sodium per day. However, in reviewing the guidelines for heart failure patients, the level of evidence for this ubiquitous recommendation is either absent or at expert opinion levels. When we searched the literature for systematic reviews, we found only one that included six European studies. Each of these concluded that for patients with advanced heart failure (NYHA Classification III/IV), those with sodium restrictions fared more poorly than those allowed to consume average amounts of sodium daily. However, these patients were restricted to one liter of fluids daily as well as receiving 250 - 500 mg of furosemide (Lasix) by mouth daily. One quasi-experimental study disagreed with these RCTs, finding that American patients adhering to lower sodium diets (<2000mg/day) experienced fewer cardiac events and lower mortality than those adhering to sodium diets containing >2300 mg/day. While the evidence certainly supports less stringent sodium restriction, American providers (and patients) do not adhere to the fluid restriction and high doses of diuretic seen in the European studies. Therefore, our group could not conscientiously promote a change in sodium recommendations without further research.

**Purpose:** The purpose of this study is to determine whether mice with advanced heart failure consuming a normal (>3000 mg) will have fewer fatal events than mice on a lower sodium diet.

**Method:** We will use an animal model (mice) with varying thresholds of heart failure. The mice will be randomized along several arms: fluid restriction of 1L vs. no restriction; levels of furosemide; and sodium intake. All animals will be treated following Institutional Animal Care and Use protocols and guidelines for humane treatment. We will monitor the following serum parameters on a weekly basis: Sodium, Potassium, Blood Urea Nitrogen, and Brain Natriuretic Peptide. We will further monitor for cardiac decompensation using Vevo 770 ultrasound imaging, and other cardiac events such as exacerbation of heart failure, myocardial infarction, hypertension, and death.

**Results:** This study is ongoing. We will be able to report results at the conference.

**Conclusions:** This study is ongoing. We will be able to report results at the conference.

**Implications for Nursing:** Implications will rely upon how these results conform to the findings of the Italian and American researchers.

Check whether the results and conclusions are available right now!!!
### CHG Baths to Decrease CLABSI

Sherita Richardson, BSN RN, Sheila Cox Sullivan, PhD RN, Lou Anne Patrick, BSN RN, Jamie Yarberry, MSN RN ICPC, Carliess Anthony BSN RN  
Central Arkansas Veterans Healthcare System

**Problem and Purpose:** Central Line Associated Bloodstream Infections (CLABSI) occur in over 41,000 patients in US hospitals annually. These infections cost billions of dollars in treatment and prolonged length of stay as well as increase the risk of mortality. Prevention of these infections is a priority for all patients who have central lines (CL), and a group of evidence-based strategies comprising the CL Bundle is used nationally to prevent these infections. However, even this bundle cannot prevent all CLABSI. An additional evidence-based strategy is bathing patients with CLs using a chlorhexidine (CHG) preparation to decrease skin colonization and subsequent infection. Any patient with a history of sensitivity to CHG is excluded.

**PICO Format Question:** For Patients with Central Lines, is there sufficient evidence to suggest that CHG baths as compared to standard soap and water bathing will decrease the incidence of CLABSI?

**EBP Model/Process:** The Iowa Model of Evidence-based Practice to Improve Quality Care

**Relevant Literature:** We searched CINAHL, PubMed, Medline, and Cochrane Review using the keywords “central line”, “infections” and “chlorhexidine”. These searches yielded 55 results, of which 38 were rejected at the title level (many having to do with the CHG patch for dressings). We reviewed 19 articles, excluding four, ultimately using 15 articles. Of these, three were systematic reviews, seven were research studies, and five were non-research sources of evidence. With only one exception, the studies indicated a decrease in CLABSI in the presence of CHG baths.

**Method:** The team developed a policy and protocol for bathing patients with a CL with 2% CHG impregnated wipes. A preliminary trial of CHG impregnated wipes vs. CHG liquid for mixing resulted in selection of the wipes due to staff preference and to ensure a consistent “dose”. Staff received education, and process was monitored via BCMA system to document fidelity to the intervention.

**Outcomes:** We will compare CLABSI rates to the previous quarter as well as the same quarter a year ago to determine whether the CHG wipes decrease CLABSI rates. We are also comparing cost savings appreciated through the prevention of CLABSI.

**Conclusions and Recommendations:** This practice change remains in progress; results will be available by the conference.

**Implications for Nursing Practice:** Aggressive prevention of CLABSI using CHG baths is useful and cost effective.
Coordinating Care through Multidisciplinary Team Rounding

Susan Brown, RN, CCRN, Shannon Smith, BSN, RN and Tiffany Teague, BSN, RN
Burn Center at Arkansas Children's Hospital

**Problem and Purpose:** The purpose of this evidenced-based practice project was to develop and implement a comprehensive, systems-based nurse-led rounding tool to improve nurse-physician collaboration, promote teamwork and reduce preventable patient harm events.

**PICO Format Question:** Does the implementation of a nurse-led systems review rounding tool improve the quality of nurse-physician communication and reduce preventable patient harm events in an adult/pediatric burn center?

**EBP Model/Process:** Melnyk and Fineout-Overholt

**Relevant Literature:** Multidisciplinary rounding has been occurring in our burn center for several years. Typically, this was accomplished by the resident physician providing a brief overview of the patient with minimal input from other disciplines. This setting was not always conducive to addressing patient problems and setting daily goals. Literature from peer-reviewed journals show the efficacy in using a comprehensive type of nurse-led rounding whereby information is presented in a body system by system format.

**Method:** A project team of staff nurses, along with nurse managers, obtained information from the literature and tailored it to develop a nurse-led rounding report tool. This form enables the primary nurse to review each body system and report any changes to the physician and multidisciplinary team in a group setting daily.

**Outcomes:** Since this change, our unit has incorporated a comprehensive approach to patient care, improved shift to shift communication with an emphasis on nurse/physician collaboration and developed a more systematic patient rounding presentation. Hospital acquired infections have decreased by 50% since this project implementation.

**Conclusions and Recommendations:** The use of a nurse-led rounding tool is generalizable to any hospital unit and can be instrumental in improving collaboration and multidisciplinary teamwork.

**Implications for Nursing Practice:** Some positive benefits of this nurse-led rounding tool include increased accuracy of rounding and nurse empowerment.
<table>
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<th>Effectiveness of fall prevention interventions</th>
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<td>Lucy Amber Cyphers, RN</td>
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<td>University of Tennessee Health Science Center College of Nursing; UAMS Medical Center, SVI Medical Center</td>
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**Significance:** Falls in the hospitalized older adult population are serious events that can result in physical and emotional injury. Complications resulting from falls include reduced mobility, fall-related injuries, decreased quality of life, and mortality. Various elements may contribute to patient falls including provider behavior, patient characteristics, and environmental factors. The Centers for Medicare and Medicaid Services deemed that falls could easily be prevented by using evidence based practice. Although evidence supports a multidisciplinary approach, research has displayed there is an obvious debate on what specific interventions effectively prevent falls in the hospitalized elderly patient.

**Purpose (or Problem):** The hospitalized older adult has an increased risk of sustaining a fall and suffering more severe consequences. Contributors to this risk include a change in environment, poly-pharmacy, illness, and treatment regimens. National guidelines currently recommend a multifactorial approach for fall prevention in the elderly. The aim of this review is to examine what specific intervention(s) effectively reduce falls and fall-related injuries in the hospitalized older adult.

**PICO Format Question:** Among hospitalized older adults does a specific single fall prevention intervention compared to multifactorial fall prevention programs decrease falls or fall-related injuries?

**Search Strategy and Quality Screening:** A systematic review was performed using The Cochrane Database, MEDLINE (systematic reviews category), TRIP, PubMed, and The National Guideline Clearinghouse. Studies included were performed between the years of 2009-2013, and relevant to the mentioned topic. Key terms searched were fall prevention, intervention, acute care, and hospitalized older adult.

**Evidence:** The search produced three systematic reviews and one randomized control trial. The level of evidence was limited to level I and II to provide the strongest level of evidence.

**Synthesis of Evidence:** Implementation of a multidisciplinary multifactorial fall-prevention program has proven effective in reducing the number of falls. There is also an agreement that increasing patient’s knowledge on risk factors and preventative measures would be beneficial to implement into practice with multifactorial program. Interestingly, it remains debatable whether multifactorial interventions reduce the number of fall-related injuries and if a single specific intervention in the multifactorial program may be more effective than others.

**Conclusions and Recommendations:** This review of literature reinforces the national guidelines in utilizing and implementing a multidisciplinary approach to apply effective interventions for prevention for falls in the hospitalized older adult. Further research is recommended to determine if a single intervention may reduce fall-related injuries.

**Implications for Nursing Practice:** Multifactorial fall prevention programs effectively decrease the rate of falls and should be individually tailored to each patient.
Developing Future Arkansas Researchers: A Qualitative Evaluation of the INBRE Program

Latrina Prince, M.Ed.,1 Stephanie Kitch, BSN, RN;2 Jean McSweeney, PhD, RN2
1UAMS, Regional Programs; 2UAMS, College of Nursing

Background: The Arkansas IDEA Network of Biomedical Research Excellence (INBRE), funded by the National Center for Research Resources, Institutional Development Award Program of the National Institutes of Health, is an annual summer research fellowship program for Arkansas undergraduate students. The goal of the INBRE program is to encourage undergraduate students to pursue careers in science. The program targets Arkansas students from groups traditionally underrepresented in science and offers a stimulating summer research experience. Students gain research experience at the University of Arkansas at Fayetteville, the University of Arkansas at Little Rock, Arkansas Children’s Hospital, and the University of Arkansas for Medical Sciences. Little is known about the impact of the program and if it is meeting the stated goal.

Purpose: The purpose of this qualitative study was to evaluate the effectiveness of the INBRE summer research fellowship program in encouraging students to pursue careers in biomedical research, particularly students from underprivileged rural Arkansas areas.

Method: Forty of the total number of students (N=145) who participated in the INBRE program between years 2002-2012 agreed to be interviewed. From the list of names provided by the INBRE program coordinator, 20 participants were randomly selected to provide qualitative feedback via audiotaped telephone interviews. After obtaining consent, program participants completed 20-30 minute interviews regarding their research experience and the influence on career choices. Demographic data were also collected and analyzed using SPSS statistical software. Interviews were transcribed verbatim and uploaded to Ethnograph, a qualitative software program. Using content analysis and constant comparison, data were then coded and grouped based on major themes.

Results: Twenty students from years 2002-2012 (13 females; 7 males) were interviewed. Most participants were ages 20-25 (N=10) and 26-30 (N=8). There were various racial backgrounds, including 12 Whites, 6 Blacks, 1 Asian, and 1 Other race. Participants attended summer programs at UAMS (N=9), UA-F (N=6), UALR (N=3), and ACH (N=2). Several themes emerged that were related to the participants’ summer research experience and the influence on professional career choices. Among these were skills learned, mentoring, relationships formed, career influence, and positive program aspects. Overall, 95% of the participants responded that the INBRE program influenced their graduate school choice and/or decision to enroll. Seventy-five percent of the participants are currently enrolled in graduate or medical school programs. Over half of the participants (65%) stated that the INBRE program changed or influenced their career path. All participants mentioned the importance of mentoring and relationships formed, and reported an overall positive summer research experience.

Conclusions: Students emphasized the importance of mentoring and relationships formed. Continued relationships had a tremendous impact on educational and career choices. Participation in the INBRE program also had a significant impact on participants’ educational and professional career choices.

Implications for Nursing: The INBRE summer programs were successful in influencing career choices. A comparable program could be developed to target a similar population and encourage them to explore nursing careers.
**Perceptions of the Causes and Treatment of Hypertension among Poor Southern African Americans**

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Jean McSweeney, PhD, RN, FAHA, FAAN  
University of Arkansas for Medical Sciences College of Nursing

**Background:** One quarter of the United States (U.S.) population has hypertension (HTN) but African Americans (AAs) are disproportionately affected. Among adults, 34% of AAs versus 24% of Whites have HTN and 3.9% of AAs versus 2.5% Whites, have had a previous stroke. In fact, AA adults have the highest rates of HTN in the U.S., especially those in poor regions of the South. An understanding of AAs’ perceptions of the causes and treatment of HTN can facilitate the development of effective interventions.

**Purpose:** The purpose of this study was to explore perceptions of causes and treatment of HTN, both prescribed and non-prescribed among poor, Southern AAs.

**Method:** We recruited AAs with HTN who were ≥ 21 years of age using purposive sampling from a free urban clinic in the South that provides free clinic visits and medications. We explored perceived causes and treatment of HTN through audio recorded one-hour individual interviews. We used content analysis and constant comparison to analyze verbatim interview transcripts and conducted medical record audits for the previous year to confirm the diagnosis of HTN and prescribed medications and recommended lifestyle changes.

**Results:** Twenty-nine AAs participated, 15 women, 14 men; mean age 49 years; 52% had taken anti-HTN medication for ≥ 5 years; the majority had ≥ high school education; 96% reported attempted adherence to prescribed medications. Medical record audits revealed elevated blood pressure for 65% of the participants despite receiving free health care and medications. Perceived HTN causes included AA dietary traditions, stress, family history, and unhealthy actions such as smoking. Commonly perceived treatments included altering diet, cultural treatments passed down such as drinking vinegar and pickle juice, increasing exercise, taking prescribed medications, and reducing stress. Many reported using seasonings such as garlic salt and seasoned salt instead of “white” salt as a means to lower their salt intake. Most reported trying to implement recommended lifestyle changes.

**Conclusions:** This sample attempted to be adherent to prescribed medications and lifestyle changes but more than half were found to have uncontrolled HTN. They did not know how to correctly modify their diet and used culturally-based home remedies that may be harmful to their HTN.

**Implications for Nursing:** Nurses must educate patients concerning specific lifestyle changes to treat HTN and query patients about alternative treatments they may be using. Future research should identify culturally-sensitive interventions to improve HTN outcomes for this high-risk population.
### Benefits of APN Coverage on Post-operative Spine Patients Related to Length of Stay

**Wanda Lusk; Wes Garrison; Kevin Cullinan**  
St. Vincent Infirmary

**Background:** There are ten neurosurgeons who perform spinal surgery at St. Vincent Infirmary. Surgeries performed include laminectomies, discectomies, and fusions of the cervical, thoracic, and lumbar spine. Two of those neurosurgeons are assisted by an Advanced Practice Nurse (APN) who is employed by St. Vincent Infirmary. The APN assists with patient rounding, progress notes, orders and discharges following spinal surgery. The remaining eight neurosurgeons are not assisted by the APN.

**Purpose:** The purpose of this study is to determine if the addition of an APN to the post-operative care team decreases the length of stay or affects the discharge disposition of patients following spinal surgery performed by the neurosurgeon.

**Method:** A retrospective analysis of length of stay and discharge disposition data of patients who underwent spinal surgery between January 1, 2011 and June 28, 2013 at St. Vincent Infirmary was performed. The study looked for differences in the length of stay between patients who were cared for by an APN in addition to the surgeon and patients who were cared for by a surgeon only. Information about discharge disposition was also examined. Data was obtained from the financial offices of St. Vincent Infirmary. Data for three Diagnosis Related Groupings (DRGs) were examined. Those DRGs include cervical spinal fusion without cc/mcc, spinal fusion except cervical without mcc, and back and neck procedures except spinal fusion without cc/mcc. The top five percent and the bottom five percent of the data were excluded. Analysis of the data obtained was completed by using chi square for independent variables and t-test or nova for dependent variables. A one-tailed, independent t-test was utilized to determine whether there was a statistically significant difference in length of stay and discharge disposition for populations with or without an APN involved in their post-operative care. The group cared for by the surgeon and the APN post-operatively was designated as the experimental group. The group cared for by the surgeon only post-operatively was designated as the control group.

**Results:** When all DRGs are combined into a single sample, the t-test indicated that post-operative care of an APN improved patient outcomes at a statistically significant level for both length of stay and discharge disposition. In the experimental group (n=897), the mean length of stay was 2.02 days and patients were discharged to home 96.7% of the time. In the control group of patients (n=104), the mean length of stay was 3.58 days and 75.5% of patients were discharged to home.

**Conclusions:** This study demonstrated that the addition of an APN to the post-operative care team significantly decreased the length of stay following spinal surgery. The patients cared for by the APN were also more likely to be discharged to home as opposed to a rehabilitation or skilled nursing facility.

**Implications for Nursing:** With healthcare changing rapidly, hospitals must find ways to decrease cost while continuing to provide quality care. Advanced practice nurses may play a key role in meeting these goals. Additional research in other service lines such as medical, general surgery, and cardiology is needed to determine if APNs can affect outcomes in those areas.
Poster Presentations
**Compassion Fatigue in Healthcare Workers**

Becca Austin; Erin Bush  
UAMS Medical Center

**Significance:** Compassion fatigue can be an unrecognized burden to nurses. It is important for all nurses to be aware of this phenomenon.

**Purpose (or Problem):** The UAMS Nursing Research and Innovation Council was asked to complete a formal literature review of Compassion Fatigue in response to a request from a staff nurse.

**PICO Format Question:** N/A

**Search Strategy and Quality Screening:** Searches were limited to the last 5 years, English only. Search terms used were compassion, fatigue + nursing.

**Evidence:** 36 articles met article inclusion criteria.

**Synthesis of Evidence:** Articles meeting the inclusion criteria were reviewed and a narrative description of the nursing implications was created for each article. Of these narratives, several themes emerged. First, compassion fatigue as a phenomenon is a familiar concept to most nurses. Second, the Professional Quality of Life (ProQOL-R-IV) is recommended as a tool for measuring compassion fatigue. Third, the phenomenon is well recognized as a problem in nursing, but the risk factors, causes, process and manifestations are not widely understood by leaders. Finally, one study states that a nurse experiencing compassion fatigue may progress to the point that there is a permanent break in the individual’s ability to express compassion.

**Conclusions and Recommendations:** Compassion fatigue may impair a nurse’s ability to provide some therapeutic interventions. Providing compassionate care is a cornerstone of nursing practice and is written into the mission of many nursing organizations. When the work environment damages the spirit of a nurse, or permanently affects their ability to care, the care they give is incomplete. Nursing leadership must identify institutional measures for evidence of compassion fatigue and enact strategies to prevent or rehabilitate nurses who suffer from it.

**Implications for Nursing Practice:** Fitness for duty means that one can perform all of the tasks expected of them. A nurse who does not care, because they are experiencing compassion fatigue, is not able to completely fulfill their duty as a nurse.
# The Charge Nurse Role: An Evidence Based Approach

Taryn J. Bailey MSN, RN-BC  
Central Arkansas Veterans Healthcare System

## Problem and Purpose:
Unprepared charge nurses have difficulty fulfilling their first-line leadership role and responsibilities. Many are selected from the staff nurse pool with minimal clinical experience, inadequate leadership skills, and a lack of orientation to the role. This can create problems such as failure to adequately supervise other staff which impacts quality care delivery, patient safety, and patient satisfaction.

## PICO Format Question:
Among staff nurses who are assigned as charge nurse, would evidence-based guidelines delineating clear role expectations, clinical and leadership competencies, and educational preparation impact role performance.

## EBP Model/Process:
Iowa Model

## Relevant Literature:
A total of 15 quantitative and qualitative research articles, two online nursing leadership websites, and two case studies were used for this evidence-based review that addressed the charge nurse role, clinical and leadership competencies, and educational role preparation.

## Method:
The literature search process used Google Scholar, CINAHL, and EBSCO. Search terms used to locate appropriate literature were *charge nurse, competence, leadership, education, and orientation* using the Boolean operator *AND*. Search years were limited: 2003-2013 and article types were limited to quantitative and qualitative research reports.

## Outcomes:
The charge nurse role is demanding and multi-faceted requiring the staff nurse who assumes the role to provide leadership and support for clinical decision making at the unit level on a designated shift. (Flynn 2010; Eggenberger 2012). Responsibilities of the role have evolved over time requiring thoughtful consideration of staff nurse clinical and leadership competencies needed to effectively fulfill this challenging role (Connelly, Yoder, Miner-Williams 2003). Optimal orientation and education programs should focus on leadership development, conflict management, personnel management, communication, delegation, team building, and patient/family customer service (Connelly, Nabarrete, Smith 2003). Outcomes of evidence-based charge nurse training programs reveal more empowered and satisfied nursing staff (Krugman and Smith 2003), as well as smoother unit operations and staff/physician satisfaction (Armstrong and Hedges 2006).

## Conclusions and Recommendations:
Well designed and implemented charge nurse programs that include clarification of the role, clinical and leadership competency criteria, and educational preparation positively impact the performance of the charge nurse. It is recommended that these three important domains of the role be incorporated into all charge nurse programs.

## Implications for Nursing Practice:
Well prepared and qualified charge nurses reflect an organization’s commitment to developing front-line nursing leaders who will impact the delivery of high quality patient care.
### ABLS Provider Course via Telemedicine

| Tiffany Teague, Amber Files  
| Arkansas Children’s Hospital |

**Problem and Purpose:** QI: To evaluate the feasibility and cost savings of telecommunication teaching for ABLS training

**PICO Format Question:** Would advance burn life support (ABLS) education via telemedicine save unnecessary travel and provide effective education to emergency providers compared to education via traditional classroom setting?

**EBP Model/Process:** Melynek, Fineout-Overholt EBP model.

**Relevant Literature:** Burn education and telemedicine literature was reviewed to determine the best method to implement a training program. No specific literature was cited.

**Method:** 2 hospitals were selected, Fort Smith and Walnut Ridge; 10 participants learned via teleconference, while 27 participants attended onsite classroom training at Arkansas Children’s Hospital (ACH). Course registration was completed by all participants with American Burn Association (ABA) assistance. The “bridge”, the state’s telemedicine help center, set up tele-communication. 1 site utilized two way communication, and students interacted. The other site had one way communication due to equipment malfunction. Knowledge was graded via multiple choice, 50 question, test provided by the ABA. Evaluations were given to the participants in order to incite feedback about the education provided.

**Outcomes:** All remote site participants completed the ABLS lectures per teleconference; 100% pass rate was achieved by all participants via written testing. One remote site did complete the ABLS case studies and practical return demonstrations in order to receive an ACLS Provider certification, while the other site declined, stating only knowledge was needed, not a certificate, and was awarded a completion certificate only. Written course evaluations indicated some noise interference hindered learning, but overall the experience met objectives, was well presented, encouraged pass rate, was informative, and saved drive time and money. Written tests were emailed to the remote sites and were completed and graded on the same day.

**Conclusions and Recommendations:** The advantages of hosting remote site ABLS courses are many: Both onsite and remote site courses reduced the number of teachers needed for the class; thereby decreasing the cost of hosting the class. Enabled more participants to be trained at once due to lack of space at host site. Saved drive time and money for teleconference participants. The remote sites indicated they learned objectives and were able to pass the ABA written test to prove learning had been achieved. In the future, our burn center plans to offer additional remote site ABLS provider courses, including case studies and return demonstration check-offs per telemedicine.

**Implications for Nursing Practice:** Increase nursing education in treating burn injuries, reduce travel time, and reduce cost by teaching through remote sites with advanced technology such as telemedicine.
## Thermoregulation in Perioperative Services

Carolyn Martin, RNP, BSN; D'Ann Pierce, RNP; Karen Henry, RNP  
Arkansas Children’s Hospital

### Problem and Purpose: Maintaining adequate temperature control is vital in the perioperative area. Hypothermia puts patients at risk for surgical site infections and postoperative complications as well as concerns for patient safety, quality of care and reimbursement. A review of patient charts showed that our patients were dropping up to a full degree of temperature from the pre-op to OR area.

### PICO Format Question: Would the application of a hat placed in the pediatric preop area and worn throughout the perioperative experience affect the thermoregulation of the pediatric perioperative patient?

### EBP Model/Process: Melnyk, Fineout-Overholt process

### Relevant Literature: A comprehensive literature search was conducted using the search terms: surgical site infections, thermoregulation in the OR, perioperative hypothermia, thermometers and temperature monitoring. Originally the search was limited to pediatrics, but due to lack of available evidence the search was expanded to include adults. The John Hopkins Screening Tool was used to evaluate the evidence. Of the articles researched and screened, twelve articles addressed the PICO question and included: systematic reviews, journal reviews, multiple research articles and descriptive studies. While none of the articles spoke directly to the pediatric population, the research did conclude that thermoregulation is essential in the perioperative area.

### Method: 100 participants were randomly selected based on the following inclusion criteria: aged 1-18 years with no tactile or severe behavioral issues, and surgical cases lasting longer than 30 minutes. Children were randomized to one of two groups: Group 1 participants (n=50) wore a hat, and group 2 participants (n=50) did not wear a hat. The hat was placed 15-30 minutes prior to patient being taken to OR. The parents and staff were educated on the importance of the hat staying on. Temperatures were taken at admission to the preoperative area, 15-30 minutes prior to going to OR, upon entering OR and upon entering the postoperative area.

### Outcomes: 62 males and 38 females participated in the study, with an average surgical case length of 55 minutes. Group 1: percentage of temperature increase from pre-op to OR was 36%, percentage of temperature increase from OR to PACU was 48%. Group 2: percentage of temperature increase from pre-op to OR was 36% and the percentage of temperature increase from OR to PACU was 56%. There was no significant temperature difference in patients with the hat and those without.

### Conclusions and Recommendations: While this study used the same thermometer in all areas, the type of thermometer used was inconsistent in the original chart review (which could account for the one degree drop in temperature from pre-op to OR). Although there was no significant difference with those patients that wore the hat versus those who didn’t wear the hat, clinical staff in the perioperative area are using the appropriate interventions to maintain normothermia with the application of pajamas, socks, warm blankets and Baer Huggers.

### Implications for Nursing Practice: Nurses should be diligent in education with the families on the importance of maintaining appropriate temperatures in the perioperative area with the application pajamas, socks, blankets and Baer Huggers for temperature control. Perioperative thermoregulation is essential for the health and safety of our patients and an important requirement to ensure adequate reimbursement for our services.
# Taking the Fall for Kids: Implementation of a Falls Bundle to Increase Patient Safety

**Tammy Webb, MS, RN, NE-BC, Stephanie Benning, RN, CPN, Amy Allen, BSN, RN, Julie Bane, BSN, MS, RN, Thad Carter, RN, Monica Hampton, RN, Toni Lynch, BSN, RN, Rachel McKnight, BSN, RN.**  
Arkansas Children’s Hospital

## Problem and Purpose:
The purpose of this initiative is to increase patient safety by decreasing patient falls with injury. Through a children’s hospital’s participation in the Children’s Hospitals Solutions for Patient Safety (SPS) collaborative, a needs assessment discovered that the current policy lacked specific elements of an evidence-based falls bundle, most importantly a validated falls risk assessment and screening tool.

## PICO Format Question:
Will an evidence-based falls prevention program as compared to current practice decrease patient falls in a pediatric hospital?

## EBP Model/Process:
Melnyk Fineout-Overholt provided the framework for the evidence based practice model and the process was based on improvement science methodology.

## Relevant Literature:
The project team was comprised of inpatient, outpatient, and ED direct care nurses, nurse leaders, and nurse educators who reviewed the literature extensively to determine best practices for falls risk assessment and fall prevention programs. The literature provided information supporting the bundle elements and options for evidence-based, validated falls scoring tools. The conclusion of the review provided the team with evidence to support the decision making for selection of the Humpty Dumpty Falls Scale (HDFS).

## Method:
The SPS falls bundle was incorporated into the hospital's policy and procedure. This included hospital-wide implementation of the HDFS and patient-specific interventions to provide a safe environment. Prior to hospital-wide implementation of the falls bundle, improvement science methodologies were used to implement three tests of change (TOC) on two medical-surgical units. Information gathered during these TOC along with obtaining feedback from pertinent stakeholders guided the design of the hospital-wide implementation. Data collection is performed to monitor compliance with the implementation of the falls bundle. This information is used to educate nurses on specific interventions that can be used to increase the safety of the patient’s environment.

## Outcomes:
Post hospital wide implementation, a validated, evidence-based, pediatric specific fall risk assessment tool is fully utilized on all patients, including ambulatory and emergency department settings. Since joining the SPS Falls Collaborative in 2011, falls with injury have decreased by over 50%. Since the implementation, bundle compliance has been monitored and the most recent 2014 data from the inpatient setting reveals an increase in compliance as compared to data from the initial implementation.

## Conclusions and Recommendations:
The use of an evidence-based falls bundle with a validated falls risk assessment and screening tool is intended to result in a decrease in patient falls with injury and a safer patient environment.

## Implications for Nursing Practice:
Through nurse participation in a national collaborative, evidence-based solutions for patient care can be adopted and implemented to decrease patient harm caused by falls. By integrating evidence-based practice, quality improvement, and improvement science, patient safety initiatives can be used to increase positive patient outcomes.
Abstract #: 011

**Current Recommendations Regarding Hypoglycemia in Diabetic Geriatric Patients**

Kara Mincy, BSN, RN, CHPN, CRS
University of Arkansas for Medical Sciences

**Significance:** Hypoglycemia is a health and safety concern for all patients who are need of blood glucose control. In the geriatric population of patients, this concern is ever prevalent due to the increasing number and the advancement of co-morbidities, polypharmacy due to their disease processes, and potential change in cognitive function contributing to their overall health and to their ability to manage their blood glucose regimens.

**Purpose (or Problem):** There have been many new recommendations in the medical literature regarding changes in the treatment and management of geriatric patients with diabetes. As it can take up to two decades for research findings to merge into our clinical practice, it is vital to catch our practice up to these recent changes in order to care for this potentially fragile and frail population.

**PICO Format Question:** Are there any changes that should be made in our nursing practice related to the recent recommendations for the treatment and management of geriatric diabetic patients?

**Search Strategy and Quality Screening:** An electronic review of research articles from 2008-2014 was performed using the PubMed and EBSCO (CINAHL and Academic Search Elite) search engines, using the key words of “hypoglycemia”, “elderly”, and “geriatric”. Quality screening included eliminating any studies with a pediatric/young adult cohort or that did not reflect changes to practice.

**Evidence:** This resulted a total of 455 articles. Of these, 65 were reviewed and 17 were retained for further analysis.

**Synthesis of Evidence:** Several studies suggested that the use of sulfonylureas (medications such as glyburide and glipizide) increase the incidence of hypoglycemic events in elderly patients and that these medications should be avoided if possible, especially when used with a long acting insulin. In spite of this, treatment should fit the patient’s needs and should be weighted with their co-morbidities and risk of advancement of complications due to high blood glucose levels. A global consensus of physicians has increased the target hemoglobin A1c (HbA1c) to 7%, no patients should be started on treatment until their HbA1c is constantly greater than 7%, and no patient on treatment should have a HbA1c of less than 6%. The same consensus also defined hypoglycemia as 72mg/dl or less for this population. The emphasis of patient care should be placed on the safety and education of the patient. The same education should also be done with any person caring for an elderly patient with blood glucose concerns. Any hospitalization for hypoglycemia should generate a referral for a diabetic specialist to meet with the patient. Points of interest include findings that healthcare costs were significantly higher for confirmed hypoglycemia vs. no hypoglycemia cohorts (p=0.004) in elderly diabetic patients.

**Conclusions and Recommendations:** There are a broad number of recommendations and patient care points in these articles related to medical and nursing care for elderly patients. The mean recommendations focus on safety and education for the patient and their families to limit these episodes.

**Implications for Nursing Practice:** With new medication recommendations, nurses and clinicians should stay cognizant of appropriate recommendations, and ensure that the treatment prescribed for the patient is meeting their needs. Nurses that care for elderly patients should stay current with care recommendations to ensure that appropriate referrals are ordered when needed and that the education they provide to their patients and their caregivers meets the new evidence.
Abstract #: 012

Adverse drug events (ADEs) in nursing homes: A literature review
Monica L. Tenhunen, DNP, RN; Bonnie Smithers, MSN, RN; Barbara Tucker, PhD, RN
Texas A&M University-Commerce

Significance: In 2004, there were 1.5 million nursing home residents in the United States and the number will continue to increase as the baby boomer population ages. Approximately 48% of all nursing home residents take nine or more prescribed medications daily. According to current research, one of every five medication doses administered results in an error; therefore, almost half of all nursing home residents are at risk for two or more medication errors daily.

Purpose (or Problem): A staggering 1.9 million medication error-related adverse drug events are estimated to occur in nursing homes nation-wide each year. Many of these ADEs lead to emergency department visits and hospitalization. Strategies are needed to reduce the number of medication errors and the subsequent adverse drug events that follow.

PICO Format Question: For residents of nursing homes is the number of ADEs in East Texas comparable to the number of ADEs in nursing homes worldwide?

Search Strategy and Quality Screening: The literature search used PubMed, EBSCO, CINAHL, and the Cochrane Library. Search terms used to locate appropriate literature were adverse drug events, adverse drug reactions, nursing homes, and long term care using the Boolean operation AND. Search years were 2005-2014, and article types were not limited to research reports. References in articles were reviewed for other articles that fit the search criteria.

Evidence: The search produced 80 articles but this was reduced by eliminating articles that did not specifically study nursing homes. Acute hospitals and assisted living facilities have significant differences from nursing homes in terms of population, nursing staff, regulations, etc., and therefore were eliminated, leaving 8 articles for review.

Synthesis of Evidence: The examined articles indicated a range of 1.19 to over 10.0 ADEs per 100 resident months. In studies identifying the percentage of adverse drug events in nursing homes over a year, ADEs ranged from 8.0-10.5%. The mean number of ADEs per resident ranged from 0.2 to 3.7. None of the studies occurred in Texas. These studies had different methods of measuring ADEs and did not detail characteristics of the nursing homes that may have influenced study results.

Conclusions and Recommendations: There is limited evidence specific to nursing homes on adverse drug events and there is significant variation among results. Recommendation is that studies be completed in Texas to identify the number of ADEs in nursing homes in this region.

Implications for Nursing Practice: Identification of the number of ADEs in nursing homes in Texas will add to the evidence to aid in making decisions to prevent ADEs. Registered nurses involved in the care of these clients can use the evidence to determine the need to focus educational interventions and processes on ADEs to provide safe care.
**Let the Children Come to Me: Visitation on an Inpatient Mental Health Unit**

Jenifer Booth Newton, RN, BSN, MSN; Cynthia Quick, RN, BSN, MSN
Central Arkansas Veterans Healthcare System

**Problem and Purpose:** Patients requiring inpatient mental health care are commonly restricted from family interaction until discharge. However, this separation prevents maintenance of family relationships and the ability of families to mend their relationships by demonstrating behavior improvements. Staff have observed that when family visitation has been restricted, Veterans often request early discharge in order to be with their families. This suggests restricting family visitation is a violation of a basic ethical principle in nursing, that of beneficence (or do no harm).

**PICO Format Question:** For Mental Health inpatients, will permitting children visiting as compared to prohibiting child visitation decrease anxiety caused by separation of children from their parents?

**EBP Model/Process:** The Iowa Model of Evidence-based Practice to Promote Quality Care

**Relevant Literature:** OEF/OIF Veterans have communicated the stress they experience due to being separated from their children/family as well as the barriers they encounter while trying to rekindle family relationships on discharge. Family structure alterations result in children being raised by their grandparents, impacting older Veterans as well. Evidence-based recovery principles indicate including the family in the Veteran's treatment is essential for improving outcomes.

**Method:** Staff created a room dedicated for family visitation in the sally port. The room contains furniture for comfort as well as pleasant décor and toys to promote play for the children. There is also a blackboard to promote art. The room is monitored with a camera, and staff checks the room every thirty minutes during the visit. At present, the room only accommodates one family at a time. There is no time limit on the visit unless other families are waiting or the patient is required for a therapy group. The safety of the children, other family members, and the Veteran are given priority during the visit. Appropriate disinfections procedures occur following the visit prior to another family entering.

**Outcomes:** A literature review was completed to obtain data for this project. After the Family Visiting Room was created, observation data is being collected on the age of the youngest child present in the room during a visit and any comments that the family may wish to share. Anecdotally, patient and family satisfaction are significantly improved since the onset of this room. Patients are more likely to stay on the unit to finish their therapy because family relationships can be nurtured through visitation. Family members can see the improvement in interaction with significant others and children, which can promote stronger relationships and support upon discharge.

**Conclusions and Recommendations:** Visitation on a controlled-access inpatient unit provides an opportunity for staff to observe family interactions and assess the need for interventions to help the family and Veteran meet recovery goals. This interaction with families is also important in establishing discharge plans to ensure that follow up needs are appropriately addressed.

**Implications for Nursing Practice:** Nurses must advocate for the safety of all members of the family during visitation; however, the visitation must receive equal advocacy efforts. Patients who are discharged with a stronger family support system in place tend to return less frequently, be more compliant with their medical regimen, and regain a positive outlook on life. Allowing family visitation is an inexpensive intervention with powerful outcomes.
**Abstract #: 014**

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<tr>
<th>Learning Styles, Cost, Staff Preferences, and CPR: An Evidence-Based Leadership Decision</th>
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<tr>
<td>Michael Simpson BSN, RN, CEN</td>
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<tr>
<td>Central Arkansas Veteran Healthcare System</td>
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**Problem and Purpose:** The Purpose of this evidence based Leadership practice (EBLP) project was to determine whether CAVHS staff received better quality CPR/ACLS instructions via a training center (TC) or a competitor (CC). TC promotes eLearning while the CC program promotes traditional face-to-face learning activities.

**PICO Format Question:** Is there sufficient evidence to suggest staff needing CPR/ACLS training at CAVHS benefit from affiliation with TC compared to traditional methods (CC) while lowering cost and maintaining standards

**EBP Model/Process:** Iowa Model of EBP to Promote Quality Care; We also used internal cost comparison for classroom vs. online instruction was completed.

**Relevant Literature:** Review of the TC website and eLearning literature suggests there is no difference in kinesthetic or theoretical performance between eLearning and traditional face-to-face CPR/ACLS instruction. Using a cost comparison viewpoint, the lack of significant differences may support choosing the less costly method.

**Method:** The leader for this project reviewed the TC website and the CC administration manual to determine whether CAVHS affiliation with CC would maintain best CPR practice while conserving resources. Data from the Training Center supported the belief the classroom method was more cost effective. Staff were polled to determine preferences for CPR revalidation, and the staff clearly preferred TC methodology.

**Outcomes:** Significant cost saving could be realized by affiliation with CC. However, E-learning opportunities could be expanded, which more effectively met the needs of the staff. State of the art equipment would improve the classroom experience.

**Conclusions and Recommendations:** The team presented the information to the training center advisory group which endorsed affiliation. Affiliation with CC reduces cost and improves the training provided to staff. CAVHS would appreciate cost savings if affiliated with CC.

**Implications for Nursing Practice:** As leaders employing an Evidence-Based Leadership philosophy, best evidence and clinical expertise suggested using CC would be a superior choice. However, the Staff preference was honored by accepting eLearning as a preferred means of instruction.
Abstract #: 016

| The impact of in-the-field EKG on ST-Segment Elevation Myocardial Infarction (STEMI) Care and Outcomes |
|________________________________________________________|
| Deborah Meiklejohn, MNSc, RN; Aravind Rao Nemarkommula, MD |
| 1St Vincent Infirmary Medical Center, 2Heart Clinic Arkansas |

**Significance:** A phrase associated with myocardial infarction “Time Is Muscle” is well known, but is not yet guiding the public to seek rapid treatment at the onset of symptoms. Two-thirds of the total time from symptom onset to reperfusion (SOAR) occurs from symptom onset to presentation to the ED; and the remaining one-third of the total time from symptom onset to reperfusion is the door to balloon time (D2B). A faster response time and a decreased time to reperfusion can increase myocardial salvage and decrease mortality. Therefore, it is crucial to improve patient awareness of symptoms and increase their likelihood of calling 911 with the onset of symptoms of chest pain. In addition transmission of an electrocardiogram (EKG) from emergency medical services (EMS) while in the field will also decrease the D2B time. A decrease in overall SOAR time should show improved patient outcomes.

**Problem (or Purpose):** To examine the evidence on use of in-the-field EKG by EMS on time from symptom onset to reperfusion in adults with chest pain. Research shows that less than 60% of patients with chest pain contact EMS for services. EMS transmission of an EKG could expedite preparation for patient transport to the Cath Lab to receive a PCI restoring blood flow to the heart and preventing further cardiac damage.

**PICO Format Question:** Among community dwelling non-rural adults with chest pain, does early activation of EMS and transmission of the EKG from the field (with notification of possible STEMI) to the Emergency Room Physician decrease time between symptom onset and arterial reperfusion?

**Search Strategy and Quality Screening:** The literature search used Google Scholar, Cochrane Database of Systematic Reviews, guideline.gov, professional practice organization websites and manual searches based on guideline reference lists. Search terms used to locate guidelines and research studies: Door-to-Balloon times, symptom onset time, patient response time, STEMI, MI, EKG, EMS, Code STEMI, arterial reperfusion and mortality related to MI.

**Evidence:** The evidence consisted of professional practice guidelines, and experimental observational studies of patients accessing care for chest pain.

**Synthesis of Evidence:** EMS pre-hospital EKG and activation of a Code STEMI from the field showed a decrease in door-to-balloon time of approximately 20 minutes. With activation of the cardiac catheterization lab (cath lab) from the field the total time from symptom onset to arterial reperfusion decreased thereby decreasing the total ischemic time.

**Conclusions and Recommendations:** Use of pre-hospital EKG by EMS can decrease the amount of time from symptom onset to reperfusion among community dwelling non-rural adults and should be implemented. Local communities would benefit from widespread public education about the importance and benefits of EMS activation at onset of chest pain.

**Implications for Nursing Practice:** The positive outcome from pre hospital transmission of an EKG and activation of the cath lab warrants implementation at all PCI-capable facilities in Arkansas. Implementation will require new processes and procedures to ensure that in-the-field data received by fax is evaluated promptly by a MD and appropriate actions, such as activation of a Code STEMI and notification of the cath lab call team occurs quickly. Emergency room nurses and cardiac care specialty nurses are ideally situated to lead in the development of necessary policies and procedures as well as training for emergency room and hospital department staff whose roles will be involved in the process. Multidisciplinary Mock STEMI drills led by the Nurse Educator/Specialty Nurse will help streamline response time and identify needs for improvement.
# Reducing CHF Readmissions Using Telehealth

**Donna J. Ussery; Amy L. Hester; Susan Smith Dodson**  
University of Arkansas for Medical Sciences

## Problem and Purpose:
The UAMS Medical Center Congestive Heart Failure (CHF) Bundled Payment Committee had been charged with reducing 30 day all cause readmissions in this population starting in July of 2012 when the Arkansas Bundled Payment Initiative officially began. At that time the 30-day all cause readmission rate was 24.99% compared to a national benchmark of 23.99%. Efforts of the interdisciplinary Committee resulted in reducing the 30-day all cause readmission rates to 18.69% (20/107) during the February-April 2013 timeframe compared to a national benchmark of 19.56%. Despite improvement, the readmission rates flattened and the Committee was not making further progress.

## PICO Format Question:
Among recently discharged CHF adult patients, does a 24hr post discharge follow-up call and available triage 30 days post hospital discharge reduce readmission rates?

## EBP Model/Process:
UAMS EBP Model

## Relevant Literature:
Relevant literature was reviewed by physician, nursing and quality department personnel of UAMS Medical Center in 2013 using PubMed, CINAHL and Google Scholar databases. No literature on current studies implementing telehealth for reducing CHF readmissions was available.

## Method:
The project team consisting of the CHF interdisciplinary committee and ANGELS/Centers for Distance Health discussed current barriers in the CHF patient’s transition of care (inpatient to 30 days post discharge). A list of ‘targeted barriers’ was created and from that list a post-discharge follow-up call survey was created. In May 2013 the ANGELS call center began contacting CHF patients on the day after their discharge conduct a post-discharge follow-up survey and provide telephone triage (using a CHF triage algorithm) if any acute symptoms existed at time of f/u call. Pts were also given the Call Center number to talk to a triage nurse if any worsening symptoms they could use for the 30 days post discharge to callback to be triaged.

## Outcomes:
After 3 months of implementation the 30 day all cause readmission rates were at 12.79% (11/86) compared to a national benchmark which remained steady at 19.17%.
The cost of a CHF admission to UAMS Medical Center from July 2012 to July 2013 averaged $12,000. Had our rates of 30 day all cause readmissions remained the same for the May/ June/ July timeframe, we would have readmitted 16 patients. Instead, we readmitted 11 patients which was a 31% decline representing a savings of $60,000 to the organization which would not have been reimbursed under the Arkansas Bundled Payment Initiative. Further long term outcomes will be presented.

## Conclusions and Recommendations:
The program has proven successful in its present state and is worth continuing. Recommendations for improvement: identify methods to reach more patients, form a means of communicating trends noticed by Call Center back to the inpatient healthcare team.

## Implications for Nursing Practice:
Using telehealth is a viable means of reducing CHF readmissions.
Hypodermoclysis: A different vein in hydration

Sue Ragsdale MSN, ACNS-BC
Central Arkansas Veterans Healthcare System

Problem and Purpose: Hospitalization in the elderly population is costly, both financially and functionally. An elder’s ability to remain independent in activities of daily living (ADLs) is threatened by the unfamiliar surroundings and inflexible routines of a hospital. As many as 7% of all hospitalizations of the elderly in the U.S. are for the purpose of intravenous (IV) therapy to treat dehydration (Boltz et al, 2011). Hypodermoclysis is the infusion of parenteral fluids into the subcutaneous tissues. The technique lost favor in the U.S. in the late 1950’s after improper use led to serious complications (Remington & Hultman, 2007), but is gaining renewed attention as a safe alternative to IV therapy. It is easy to insert, simple to perform, and infusions can be turned on and off without removing or capping the insertion site. Because the risks of septicemia, thrombosis, and gas embolism are avoided, hypodermoclysis requires less monitoring and less skill than IV therapy and may safely be initiated in long-term care settings.

PICO Format Question: In the older adult population, how does hypodermoclysis compare to intravenous fluid replacement therapy for efficacy, acceptance, safety, and cost?

EBP Model/Process: Iowa Model

Relevant Literature: A total of four quantitative and qualitative research articles, two case studies, and one systematic review were used for this evidence-based review that compared hypodermoclysis with IV therapy in at least one of the four criteria.

Method: The literature search process used Google Scholar, CINAHL, OVID, and EBSCO. Search terms used to locate appropriate literature were dehydration, hypodermoclysis, and elderly using the Boolean operator AND. Search years were limited to 2000-current, with the exception of a 1991 landmark study. Article types were limited to quantitative and qualitative research reports.

Outcomes: In a landmark study, Lipschitz and associates (1991) established efficacy by using radioisotopes followed with serum markers and imaging to compare the absorption of 500 milliliters of normal saline given in IV and by hypodermoclysis and concluded the two methods were comparable. Clinical efficacy for treating dehydration established through changes in chemistry profile and patient assessments were also comparable (Slesak et al, 2003, Chassagne et al, 2006, Noriega et al, 2013). Patient acceptance, comfort, and preference evaluated with questionnaires and staff observation indicated a preference for hypodermoclysis and no strong method preference among nurses and physicians (Slesak et al, 2003). Adverse event profile ranged from comparable to significantly reduced in the hypodermoclysis group (Dasgupta et al, 2000, Remington & Hultman, 2007), though Mongardon and associates (2008) reported a rare case of intestinal perforation and subcutaneous emphysema. Mild local reactions associated with hypodermoclysis were reported in all studies. Schoenbeck (2010) reported significant cost savings with hypodermoclysis, when compared to intravenous therapy.

Conclusions and Recommendations: Based on the literature, hypodermoclysis provides an efficient and cost effective alternative to IV therapy with minimal complications.

Implications for Nursing Practice: If implemented in long-term care settings, hypodermoclysis may prevent the need for hospital transfer to treat dehydration in elderly patients.
Learner’s Perception of Simulation: An evaluation

Lana St. Clair, MSN RN, Clinical Nurse Educator; Amy Ramick, MNSc, RN, ACNS-BC Clinical Nurse Educator; Patti Esmail, MSN/ED RN CCRN, Clinical Nurse Specialist
St. Vincent Infirmary

Background: The use of high-fidelity simulation has become an integral part in the training of health care professionals in recent years. Simulated clinical experiences have demonstrated value in assisting nurses to gain knowledge and develop clinical skills in a safe and controlled environment. The project team reviewed the current literature on learner’s perception of simulation in high fidelity simulation learning and although there are many studies on the pre-licensure nurse’s satisfaction, critical thinking skills, and self-confidence in using simulation learning, there is limited data on simulation learning from the perception of the experienced nurse in a hospital setting.

Purpose: The purpose of this study was to investigate the experienced nurse’s perception of patient care simulation. The information gained from this study will provide data that will be beneficial in the planning and developing of simulation learning events for the experienced nurse in a hospital setting.

Method: The convenience sample for this qualitative and quantitative study consisted of 36 licensed nurses. These nurses were either experienced nurses enrolled in an ACLS class or new graduate nurses recently hired to the hospital who were performing assessment skills and code white drills using the high-fidelity manikin in the simulation lab. A 15 question survey was developed to measure learner’s perception of the simulation learning experience. St. Vincent received permission to use a portion of the questions from the SPECTCS© survey developed by Cynthia Reese. Surveys were administered following the simulation learning event. This study approved by the IRB with exemption indicating subjects cannot be identified and no identifiers link to participants.

Outcomes and results: Of the 36 participants enrolled in the study, all agreed to participate and submitted surveys. Participants included both experienced nurses and new graduate nurses. Data collected from the surveys was analyzed to determine learner’s perception of the simulation learning experience. Fifty-six percent of participants indicated simulation helped them to develop critical thinking skills and fifty-eight percent indicated that simulation increased their confidence in decision making skills. Sixty-nine percent of the participants indicated that debriefing post simulation supported their understanding. Seventy-five percent of participants indicated the simulation learning experience provided them an opportunity to perform skills in a non-threatening learning environment.

Conclusions and Recommendations: High-fidelity simulation provides learning experiences in transference of competencies, behaviors, and learning skills for nurses. Lessons learned from this study indicate that simulation learning provides a non-threatening learning environment where nurses can gain new knowledge and skills that will improve patient safety and quality of care. The information gained from this study will provide data that will be beneficial in the planning and developing of simulation learning events.

Implications for Nursing Practice: Potential benefits are expected to be both short term and long term. Short term effects may include additional learning opportunities for nurses at the bedside and alternative teaching and learning strategies for competency validation. Long term effects and anticipated outcomes in simulation include improving nursing competencies, communication, critical thinking skills, and facilitation of teamwork. By giving nurses access to “realistic” clinical environments, patient care simulation can provide a unique insight into how staff will perform in the clinical setting. St. Vincent Infirmary plans to expand the simulation lab and develop new curriculum and realistic patient scenarios to capitalize on the capacity for nurses to learn through simulation learning.
# Burn Center Nursing Case Conference: Identifying Problems and Developing Solutions

Regina Welch, RN IV and Elizabeth Ann Kirk, MSN, APN, ACNS-BC  
Arkansas Children's Hospital

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<tr>
<th><strong>Problem and Purpose:</strong> The purpose of this evidence-based project was to objectively review adverse patient events and discuss systems-based root causes in a non-punitive atmosphere. Upon review of the literature, physicians have used morbidity and mortality conferences for the review of adverse events or errors for many years. Since the publication of <em>To Err is Human: Building a Safer Health System</em> in 2000 by the Institute of Medicine, the nursing profession has realized a need to review their practice.</th>
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<th><strong>PICO Format Question:</strong> Among nurses in the Burn ICU and step-down unit, does implementing a nurse case conference increase ownership and accountability?</th>
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<th><strong>EPB Model/Process:</strong> The EBP process developed by Melnyk and Fineout-Overholt was used to guide this project.</th>
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<th><strong>Relevant Literature:</strong> Nursing literature supports the development of nursing review conferences to assist the front line staff in identifying and addressing patient care issues that promote clinical excellence, reduce medication errors or near misses, and improve communication.</th>
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<th><strong>Method:</strong> In the summer of 2012, the clinical nurse specialist (CNS) determined a need for review of certain adverse events or errors within nursing care in our intensive care burn unit. The conference is held every two months with topics submitted for review from nursing staff. A review of adverse events or errors seen in the Burn patients as either preventable or non-preventable formulated the topics discussed. Discussion topics focus on opportunities for improvement. The environment is non-punitive and focuses more on being accountable for nursing practice and the patient outcomes. The approach from the CNS is to evolve from being just a place to work to being a place of ownership and accountability.</th>
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<th><strong>Outcomes:</strong> Since the conference inception, topics reviewed have included self-extubation, nursing documentation, and hospital acquired conditions such as infections and pressure ulcers, etc. Discussion of these topics has been used to enhance quality improvement and drive evidence-based practice.</th>
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<th><strong>Conclusion and Recommendations:</strong> The nursing case conference has integrated evidence-based practice into optimal patient outcome and has changed the culture of clinical nursing practice.</th>
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<th><strong>Implications for Nursing Practice:</strong> These conferences are a valuable and non-threatening opportunity to review adverse events and facilitate open dialogue for nursing staff. The outcomes of these conferences can be used to drive quality improvement initiatives.</th>
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“He has allowed me to reflect on the care I provide everyday…what could I have done to prevent this or how do we as a unit work to improve outcomes. While working on the floor I rarely have time for free thought to expand on improvements/changes that could make our unit better. The conference…allows floor nurses to discuss cases and has directly impacted my care of patients and made me more cognizant.” L.B. (2 years nursing experience)
**Safe is Smart: Pediatric Burn Prevention Education**

Amber Files, BSN, RN, Susan Brown, RN, CCRN, Jason Williams, BSN, RN, Mandy Yelvington, OTR
Burn Center at Arkansas Children's Hospital

**Problem and Purpose:** Over 45% of our pediatric (ages 18 and younger) burn patients admitted in 2013 were due to scald and kitchen related burns. With the pain and disfigurement associated with burns and the cost of pediatric burn care on our unit in excess of 4 million dollars in 2012, prevention is of utmost importance. The purpose of this EBP project was to develop community based pediatric burn prevention education games and tools to be used by the Burn Outreach Coordinator and local fire departments and schools.

**PICO Format Question:** Does the implementation of age appropriate burn prevention education assist in increasing burn safety knowledge in the pediatric population?

**EBP Model/Process:** Melnyk and Fineout-Overholt; Pender’s Health Promotion Model and Levels of Prevention Model (Primordial and Primary prevention levels).

**Relevant Literature:** The project team comprised of Nurses, Burn Center Outreach Coordinator and OT reviewed literature regarding the development and implementation of age appropriate tools and games to teach burn prevention. Based upon literature of the primordial prevention level, it was found that if integrating burn knowledge in the pediatric population, children would be discouraged from adopting unsafe habits regarding fire and burn safety.

**Method:** All inpatient burn etiologies were entered into a database revealing a large percentage of pediatric burns caused by scalds and kitchen related accidents. The project team developed age appropriate prevention tools such as informational posters, sorting games and a board game to be used in elementary schools and daycare centers. An age appropriate pre and posttest was developed and initiated to determine efficacy of the games and highlight areas for improvement.

**Outcomes:** From reviewed database information, we determined a need for age appropriate burn prevention materials. A board game, sorting games, and a microwave wattage wheel was developed. These tools will be used to teach burn prevention in local communities. A pre and posttest will be used to help determine efficacy of the prevention teaching.

**Conclusions and Recommendations:** The analysis of the pre and post tests to determine the efficacy of the prevention teaching will assist in guiding any changes needed in the tools.

**Implications for Nursing Practice:** If proven effective, these tools can help assist Nurses in Community Health settings.
Mucositis Prevention in the High Dose Melphalan Patient.

Ginger Hart, BSN, RNIII
University of Arkansas for Medical Sciences. Stem Cell Transplant.
Myeloma Institute for Research and Therapy

**Background:** Oral mucositis prevention in the high dose Melphalan patient is of the upmost importance to the stem cell transplant nurse and patient. The development of oral mucositis can cost the hospital money and extends the length of stay for patients. These article reviews will educate the RN on key prevention strategies and feasibility of the methods for preventing oral mucositis in this population.

**Purpose:** To inform clinicians of different grades of oral mucositis and prevention options.

**Method:** Review of literature and discussion of current evidence base practices at UAMS. Review of local cost of drug therapy performed.

**Results:**
Four grades of oral mucositis are identified by the World Health Organization (WHO):
- Grade 1- Erythema plus pain, function irrelevant.
- Grade 2-Ulceration, able to eat solids.
- Grade 3-Ulceration, ability to eat liquids.
- Grade 4-Ulceration, nothing by mouth.

There are three options identified in the review of literature for mucositis prevention:
1. Treatment with Palifermin (60ug/kg) for three consecutive days prior to initiation of chemotherapy and after autologous hematopoietic stem-cell transplant. Reductions in grade 3 and 4 OM compared with placebo (63% vs. 98%). Significant grade 4 mucositis reduction (20% vs. 62%). Decreased recovery time (median of 6 days vs. 9 days). Less use of IV opioid Morphine (212mg vs. 535mg). Less use of TPN (31% vs 55%)
2. Cryotherapy- Patients were instructed to place one ounce of ice chips in mouth and allow to melt immediately prior to administration of Melphalan and for 6 hours after the end of the 30-minute infusion. Placebo of normal saline rinses used. Decrease in grade 3 OM (14% vs 74%). No grade 4 OM noted.
3. Sucralfate-Patient given medication and held in mouth for 1 minute before swallowing starting 1 days prior to chemotherapy administration and continued until ANC >0.5. Decrease in grade 3 and 4 OM when compared to placebo (29% vs. 47%). Significant reduction in diarrhea (25% vs. 53%).

**Implications for Nursing:** Prevention of oral mucositis is a critical nursing role in the patient receiving high dose Melphalan. Failure of the nurse to implement these options causes increased length of hospital stay, increased infection rates, higher doses of narcotics, and increased TPN usage.

**Conclusion:** It’s important for nurses to be informed of prevention options and their usefulness and availability. Incorporation of one of these options should be included in any high dose Melphalan patient.
Sleep Disturbance and Medications as Fall Risks

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Background: Falls are the most common cause of nonfatal injuries and of injury-related death in adults 65 years and older, accounting for over $30 billion dollars in yearly direct medical costs. Fifty-eight percent of postmenopausal breast cancer survivors reported falling within the first two years following treatment, suggesting higher fall risks.

Purpose: The purpose of this study was to describe sleep, sleep medications, and musculoskeletal disorders in older women with and without breast cancer as they relate to evaluating their risk of falls.

Method: This descriptive comparative study was based on a convenience sample of 67 women based on a power analysis estimate of 70. The setting was an urban medical center oncology clinic and senior apartments in the southern U.S. The sample included 67 women (mean age 65 years; SD=9.38; 50-90 years), and demographically similar breast cancer (n=32) and comparison (n=35) groups. We assessed nocturnal awakenings using the Pittsburgh Sleep Diary, and bathroom awakenings using the Pittsburgh Sleep Quality Index. Medical record reviews and patient interviews were data sources for sleep medications and musculoskeletal diagnoses. We used NCSS to calculate descriptive statistics, including means and frequencies. Chi square with Yates correction was used to compare groups for classes of sleep medications used.

Results: Nocturnal awakenings were similar for breast cancer and comparison groups (2.69 vs 2.33; expected 0-6 times/night); and similar for trouble sleeping once or twice a week due to bathroom awakenings (2.19 vs 1.91; 2 = 1-2X/week). More women in the breast cancer than comparison group reported awakening three or more times per night (37% vs 27%), and slightly more bathroom awakenings three or more times a week (63% vs 57%). Benzodiazepine use for sleep was higher in the breast cancer than comparison group (16% vs 6%), as was use of antidepressants (6% vs 3%) and antihistamines (13% vs 9%), but not significantly. Non-benzodiazepine use was the same for both groups (6%). Total sleep medication use was higher in the breast cancer than comparison group (42% vs 29%). More women in the breast cancer group had osteoarthritis (41% vs 31%) and osteoporosis (16% vs 3%).

Conclusions: Approximately one-third of our total sample reported awakening frequently at night, and two-thirds reported trouble sleeping due to bathroom awakenings at night three or more times a week. One-third took sleep medications nightly, many with side effects of confusion, delirium, and increased risk of falls and fractures. Slightly more than one-third had osteoarthritis, and one-tenth had osteoporosis. Women with breast cancer may have higher risks of falls.

Implications for Nursing: Our findings suggest that sleep and sleep medications should be routinely screened, and may serve as the basis for further research of falls in this population.
**Childhood Sexual Trauma in Female American Indian / Alaskan Natives**

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**Significance:** American Indian/Alaskan Native (AI/AN) children are significantly more likely to experience adverse childhood events (ACE) than the general population. Urbanization and historical trauma of the tribal people have led to health disparities in all areas of well-being greatly increasing the risk for ACE.

**Purpose (or Problem):** Childhood sexual abuse of AI/AN females has been directly linked to mental illness, substance abuse, re-victimization, incarceration, and suicide. Effective interventions must be identified that meet the specific and unique needs of the tribal population with goals of prevention and generational trauma cycle disruption.

**PICO Format Question:** Among AI/AN female victims of childhood sexual abuse, does providing culturally competent trauma informed care compared with providing general evidence based interventions result in a decreased risk for negative lifelong outcomes?

**Search Strategy and Quality Screening:** Articles used for this review include those published between 2003 and 2013 found in an Ebsco and Google Scholar search using the terms: Native American, American Indian, Tribal, Sexual Abuse, and Sexual Trauma. Quality screening was done by checking evidence for having addressed AI/AN female sexual abuse and the cultural context of its etiology, prevalence, effects, prevention, and treatment. Meta-analysis and systematic reviews were excluded.

**Evidence:** An initial search revealed over 6,000 articles; however, this number was significantly reduced when articles focusing only on the AI/AN population were used. A total of 8 articles were identified for this review.

**Synthesis of Evidence:** All of the included articles stressed the overwhelming prevalence of ACE in the AI/AN population. Trauma Focused Cognitive Behavioral Therapy (TF-CBT) has been identified as a successful treatment of trauma to the general population. TF-CBT can be culturally adapted when the provider incorporates traditional AI/AN concepts or traditions such as “the circle” or healing rituals.

**Conclusions and Recommendations:** Providers should be screening for all types of ACE in the home in AI/AN populations. Early identification of traumatic experiences in this population is a key to breaking the cycle of ACE leading to unhealthy adults that set up an environment for their children to experience ACE.

**Implications for Nursing Practice:** Culturally competent care of AI/AN ACE utilizes a combination of TF-CBT with tribal norms. Preparations with tribal leaders and trust of the community or even individual patients is important to promote participation, compliance, and best outcomes.
# Literature Review: Patient Factors Associated with Injurious Falls

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**Significance:** Patient falls continue to be significant adverse events across settings. Previous research has focused on predicting those at risk to fall but little research has focused on who is at risk for injury should they fall.

**Problem (or Purpose):** To identify which patient factors are associated with injurious falls.

**PICO Format Question:** Are there patient factors evidenced in the literature to be associated with falls resulting in injury in the following settings: hospital, long term care, rehab and community?

**Search Strategy and Quality Screening:** Studies for inclusion were selected after a search of the literature was conducted using the following databases: PubMed, CINAHL, Health Science, Academic Search Elite, Medline, and Cochrane EBM Reviews. No time or language limitations were utilized in the search. The search strategy included the terms “fall injury risk”, “fall injury predictor”, “injury predictor”, “accidental fall AND injury”, and “accidental fall AND injury in hospitals”. Additional articles were identified after hand searching the bibliographic references. Abstracts of all articles identified by the search were reviewed including two abstracts translated from Japanese to English. Those studies only examining fall risk factors and studies in pediatric populations were excluded because this study focuses on fall injury risk factors in hospitalized adults. Full text articles were retrieved for those studies meeting eligibility requirements. Standardized quality assessment using a prescribed method such as proposed by White and Schmidt (2005) was not useful for this review since this synthesis does not evaluate intervention studies. In addition, when researching falls, blinding is not often useful, practical or necessary and these studies are often done retrospectively or prospectively with matched pairs or case-control methods where dropouts are not an issue. Instead, quality assessment of articles retrieved for this synthesis was done so on the basis of whether the article provided data on factors related to injurious falls and whether or not the article operationalized the definition of injury or harm.

**Evidence:** 625 potentially relevant abstracts were reviewed. 1 was in German and could not be translated, 2 were translated from Japanese. 40 subsequent abstracts were retained from primary sources meeting inclusion criteria. 28 total articles met inclusion criteria.

**Synthesis of Evidence:** Ten factors were identified as being associated to injurious falls across settings: age, female gender, fall history, use of cardiovascular (CV) medications, use of central nervous system (CNS) medications, cognitive impairment (CI), medical diagnoses, lab values, mobility, and body mass index (BMI).

**Conclusions:** Several factors are associated with injurious falls, but they vary by setting. Further research is needed to evaluate these factors in each setting to establish associations of each factor to injurious falls by setting.

**Implications for Nursing Practice:** Because injury is the morbid outcome of interest from falls, concentration on this area in necessary. Knowing which patient factors are associated with injurious falls can assist in the prediction of which patients are at risk so prevention measures can be targeted to those individuals.
**Falls and Older Adults**

Andrew Sexton  
Southern Arkansas University, College of Nursing

**Significance:** This study was significant due to its focus on advancing the current education information, and assessment tools available to nurse’s regarding fall risk that is in clear need of research evidenced by the current statistics on the increasing fall injuries in the older adults.

**Problem:** Falls are the leading cause of injury deaths in the elderly population in both community and institutional settings, calling into question the current available rapport between nurse’s and their older patients.

**PICO format question:** Among the older adult population is there evidence showing that there is a need to make changes in fall risk education and assessment tools to decrease the increasing presence of fall injury’s in community and institutional settings?

**Search strategy and Quality Screening:** Using the EBSCOhost search engine I found five sources that focused on five different areas of fall risk research that focused on the education and assessment tools utilized in the fall risk assessment process in both community and institutional settings.

**Synthesis of Evidence:** The reviewed articles clearly outline that the older adult population could benefit from a change in education materials, and utilization of the most accurate assessment tools. However due to the lack of current research available, there is also a need to identify what changes would provide the most beneficial changes in the attitudes towards education materials, as well as what changes in assessment tools provide more accurate and beneficial results. It is fairly clear however that the most affective changes would be in the education area by providing more positive primary intervention information to those at most at risk for fall injuries.

**Conclusions:** There is a definitive need for a change in educational practices to a more positive, supportive system, and that although the Morris and Hendrichs II fall assessments have the most positive results there is also a need to do further research into assessments and possibly develop more efficient tools.

**Implications for Nursing Practice:** By utilizing this information community health nurses and clinical nurses could greatly increase the safety of their patients related to fall’s, and help decrease the prevalence of fall related injuries and deaths.
**Functional Decline in Older Adults During Hospitalization**

University of Alabama at Birmingham and University of British Columbia |

**Problem and Purpose:** The purpose of this study was to determine if functional decline in older adult patients aged 60-70 during their hospitalization was caused by decreased mobility and how extensive the effects were on their lives.

**PICO Format Question:** Are geriatric patients more predisposed to functional decline if interventions are not initiated early in care or if mobility is limited during their care?

**EBP Model/Process:** Randomized control trial; Researchers used these specific assessment tools: Modified Blessed Dementia Rating Scale (mBDRS), Activities of Daily Living scores, Charlson Comorbidity Index, Mini-Mental Status Examination (MMSE) (Folstein et al), Acute Physiology and Chronic Health Evaluation II (APACHE II).

**Relevant Literature:** Average mobility was scored from 0 to 12; The low-mobility group had a score of 4 or less, the intermediate group had a score of 4 to 8, and high mobility groups score was higher than 8.

**Method:** A prospective cohort study conducted in an 800 bed university teaching hospital grouped geriatric patients according to their mobility level from low to high on a scale of 0 to 12. The team measured results using the mobility assessment scores throughout geriatric patients hospital stay. Another study used a randomized control trial and a computer program to separate groups of geriatric patients into two sets randomly. They used blinded personal interviews with assessment tools for data collection at the beginning and throughout the hospital stay. Individualized health promotion programs were only given to the intervention group and not the controlled group.

**Outcomes:** The results showed that the lowest mobility group (4 or less), which was common, ordered with bed rest by physicians had more adverse outcomes than any other mobility group. In the other study an intervention program was initiated for one group and their scores were significantly higher than the control group when evaluated with assessment tools within the first four weeks after discharge.

**Conclusions and Recommendations:** This concludes that early intervention with geriatric patients can alleviate functional decline from continuous hospital stays. Trends from research studies show that functional decline is more prevalent due to drug therapy regimens or immobility that causes dependency in geriatric patients.

**Implications for Nursing Practice:** Adverse outcomes from immobility can possibly be an iatrogenic factor which leads to other complications like functional decline.
Abstract #: 038

**Keys to Student Success in a Nursing Program and First Time Pass Rate on the NCLEX-RN Examination**

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**Significance:** It is estimated that 711,900 more nursing graduates are needed to meet the need for registered nurses by 2020. The projections also include the need for 495,500 nurses. The logical way to increase the number of nurses to meet the projected need is to increase the number of students entering and graduating from nursing schools and passing the NCLEX-RN. According to NCSBN, in 2012 there were 150,255 candidates who took the NCLEX-RN with a pass rate of 90.34% and in the 1st three quarters of 2013 there were 142,532 candidates with pass rates 84.28%. There are not enough students graduating to meet the demand for nurses. Adding to this lack of new nurses in the workforce is the inability of nursing programs to accept all qualified applicants to their programs. Both the NLN and AACN organizations report similar information regarding the number of qualified applicants to pre-licensure BSN programs that were turned away and not accepted into the programs. The range reported is 36-37% of qualified applicants are turned away from BSN programs from 2010-2012.

**Purpose (or Problem):** One potential strategy to address the issues of the high attrition and low graduation rates of nursing students is in the area of identifying characteristics of successful nursing students to guide applicant selection.

**PICO Format Question:** Do successful nursing students have different academic and/or personal/behavioral characteristics than unsuccessful nursing students?

**Search Strategy and Quality Screening:** Search engines including EBSCOhost, Google Scholar, PubMed, and Ovid were used with the key words such as attrition, graduation, completion rates, success, failure, student, and nursing student in various combinations. Search years were limited: 2008 - 2014 and article types were limited to research reports in peer reviewed journals. Data bases included CINHAL with full text, Academic Search, ERIC, PsycINFO, and Health Source: Nursing/Academic Edition MEDLINE.

**Evidence:** The search identified 111 studies. No studies RCT studies were found. Only articles identifying the level of significance for the findings were included. A total of 14 articles; admission (3), attrition (7), and retention (4) were included in the review.

**Synthesis of Evidence:** Three major categories emerged. The categories are pre-college preparation in the areas of vocabulary, writing, and math; tools for college success such as time management and study skills, and lastly, personal qualities/characteristics including areas such as self-confidence, self-efficacy, over confidence, and family support.

**Conclusions and Recommendations:** Using both academic and personal/behavioral characteristics of nursing applicants may provide a potential answer to the high attrition and low graduation rates of nursing students. Further studies need to be conducted comparing the academic and personal/behavioral characteristics of successful and unsuccessful nursing students.

**Implications for Nursing Practice:** Academic and personal/behavioral characteristics of nursing school applicants can be used to guide faculty in acceptance of the applicants most likely to be successful in a nursing program and the first attempt of the NCLEX-RN.
**Breastfeeding vs. Bottlefeeding**

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Henderson State University Student Nursing

**Significance:** To inform child-bearing mothers of the benefits of breast milk versus formula.

**Purpose (or Problem):** Lack of knowledge of benefits that breast milk can provide to newborn babies, Social issues associated with breast-feeding mothers.

**PICO Format Question:** In newborn infants, does breastfeeding result in a better immune system as opposed to infants that are not breastfed?

**Search Strategy and Quality Screening:** MEDLINE, CINAHL COMPLETE

**Evidence:** We searched the key words “breastfeeding” “innate” and “immunity” on the MEDLINE and CINAHL COMPLETE databases. This search resulted in many articles which we narrowed to three articles that are peer reviewed studies. These studies looked at the effects of breastfeeding in newborn infants and how it affected their immune systems compared to the effects of bottle feeding.

**Synthesis of Evidence:** The duration of hypoxemia in non-breastfed infants was longer than breast-fed infants, the non-breastfed infants with pneumonia along with diarrhea had a higher probability of cough, hypoxemia, and severe under nutrition. The study further revealed that there was a higher death rate among non-breastfed infants compared to those who were breastfed.

**Conclusions and Recommendations:** We recommend that all mothers nurse newborn infants through breastfeeding.

**Implications for Nursing Practice:** Studies show that breastfeeding improves immunity in newborns, There are more immunity benefits for breastfed children as opposed to bottle-fed children.
Alcohol Abuse and the Elderly Population

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**Significance:** Alcohol abuse is no longer a characteristic of younger generations. The elderly population worldwide is increasing, and with this increase the number of elderly people with alcohol abuse problems is also increasing. This literature review aims to review research studies that have investigated characteristics, predictors, identification/screening tools, and interventions for the population of elderly persons who abuse alcohol.

**Purpose (or Problem):** The purpose of the literature review was to identify characteristics that are predictors of alcohol abuse among the elderly, evidence based assessment tools for use by health care professionals, and effective treatment options for this age group.

**PICO Format Question:** The question is threefold. Is there evidence in the literature identifying 1) characteristics and predictors of alcohol abuse within the elderly population; 2) valid assessment tools for use by nurses and other health care professionals to determine alcohol abuse among the elderly population, and; 3) effective treatment options for this growing population?

**Search Strategy and Quality Screening:** A search of the databases EBSCO and ScienceDirect was conducted using the keywords “alcohol abuse” and “elderly” to obtain information for this literature review. Research articles published between the years 2008-2013 were selected for inclusion.

**Evidence:** The search provided many articles relating to alcohol abuse among the elderly. Six articles were chosen that looked at predictors and characteristics of elderly patients who may abuse alcohol and how nursing interventions in treating alcohol abuse should be focused.

**Synthesis of Evidence:** Characteristics, prevalence, and predictors of unhealthy alcohol consumption among the elderly population included those having greater financial resources, a positive perception of health status, and a social environment where alcohol consumption is accepted. The AUDIT screening instrument may be more effective than the SMAST-G and CAGE screening instruments for identifying those individuals at a higher risk for unhealthy alcohol consumption. An integrated care model may reduce the stigma which would lead to higher participation and that the use of a harm-reduction treatment model showed a higher decrease in the number of binge-drinking episodes when compared the 12-step program.

**Conclusions and Recommendations:** Elderly patients who report their health as good and who have financial stability are more likely to abuse alcohol. Further research in the type of treatment model needs to be conducted.

**Implications for Nursing Practice:** Nurses need to question drinking habits among those elderly patients who have a positive view of health status and those who state financial stability. Development of screening tools that look at these characteristics can help the nurse to identify the elderly patient who maybe engaging in unhealthy alcohol consumption.
# Evaluating the Effectiveness of Cognitive Impairment Assessment Tools

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**Introduction:** Cognitive impairment has recently morphed into a widespread health problem in the United States, and the health situation that cognitive impairment has created is progressively becoming an international health concern. My research concerning the CAM-ICU and ICDSC agreement, Mini-Cog, and the SQiD screening instruments and the Reliability of Bedside Intensive Care Unit Nursing Assessments from 2007-2010 reveal that the assessment tools have not been adequately evaluated to determine whether or not the assessment tools are effective in detecting cognitive impairment in an individual.

**Methods:** A review of the literature was conducted over six articles, including a correlational research design, two prospective cohort studies, mixed methods research design, quality improvement initiative, and a within-subjects design. The studies and articles were reviewed and compared for the strengths and weaknesses. I observed the designs, samples, interventions used, measurements of reliability and validity, statistical findings, and categorized the strengths and weaknesses. The research was compiled into a solid document and chart to analyze the information obtained. Once the information was reviewed and compartmentalized, I was able to draw a conclusion about the research supporting the cognitive assessment tools used in practice.

**Results:** Six articles concerning cognitive impairment and assessment of cognitive impairment were reviewed. The articles yielded information on assessment tools and the reliability and validity of each tool. The evaluation of the research concerning cognitive impairment assessment tools is powerful, but the research is not necessarily strong. Most articles showed high sensitivity and specificity scores; however, research concerning the Mini-Cog and the research concerning the Confusion Assessment Method (CAM) compared to psychiatric interview, display lower scores in the areas of sensitivity and specificity. Overall, the observed effects within the research are powerful. The research has sufficient power, and the research has adequate reliability and validity to support the continued use of the many cognitive impairment assessment methods studied in the research conducted; however, research strongly suggests that more research needs to be conducted to find improved instruments to detect cognitive abnormalities in individuals as there are several gaps in the literature.

**Conclusion:** Evidence obtained through research supports use of the assessments for the Single Question in Delirium (SQiD) assessment and the Confusion Assessment Method (CAM), but evidence did not strongly support the use of the Mini-Cog assessment in detection of cognitive impairment. However, despite the varying opinions of the assessment tools evaluated, evidence supports the use of all the assessment tools performed in the studies, when administered by a health care professional that has been trained in administration of the assessment tool being used in practice.
# Sexuality in the Elderly

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**Significance:** The population of the world is steadily getting older. People are simply just living longer. So we need to be aware that elderly people are still sexually active.

**Purpose (or Problem):** The purpose of this study was to inform people of how many elderly people are sexually active. I also researched how prevalent erectile dysfunction is in elderly men. Also how elderly people thought their health affected their sexual desire.

**PICO Format Question:** Do elderly men and women still have sex regularly?

**Search Strategy and Quality Screening:** The five quantitative research articles used discuss sexuality in the elderly population they were found on the Science Direct Database. The keywords used were "sexuality" and "elderly — with assist from the Boolean operator "AND." Search years were limited: 2007-2013.

**Evidence:** In a study by Walan and Nielsen the subjects were asked if they still have intercourse with their partner and 29% of men and 39% of women say that they never have intercourse; whereas, 14% of men and 19% of women have sex a few times a year. In the sample 4% of men and women aged 60 to 80 still have sex once a day. Most of the women reported that if their sex life had ceased it was their male partners’ fault. When asked about orgasms, 44% of men and 12% of women said that they always reach orgasm with their partner.

**Synthesis of Evidence:** After analyzing research articles it is apparent that both elderly men and women are sexually active and enjoy sexual activity as long as their health permits it.

**Conclusions and Recommendations:** Elderly patients still have and enjoy sexual activity. They are mentally affected if health problems keep them from this. Such health problems include erectile dysfunction and heart problems.

**Implications for Nursing Practice:** When getting a medical history on an elderly patient do not avoid the fact that they still might be sexually active.
Treatment of Acute Respiratory Distress Syndrome- a Case Review

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Clinical Significance: Acute Respiratory Distress Syndrome or ARDS is a severe lung injury disease that can debilitate patients and oftentimes lead to mortality. Early diagnosis and treatment of ARDS is paramount for the survival. Mechanical ventilation with a low tidal volume and high PEEP volumes is standard treatment. Other options are still being researched. Current practice that is utilized involves inverse ratio mechanical ventilation and supportive care.

Statement of the Problem (or Purpose): The purpose of this work was to explore evidence from literature and practice guidelines and clinical setting experience to evaluate ARDS.

PICO Format Question: In adult ARDS patients is the standard treatment of inverse ratio mechanical ventilation, systemic steroids and antibiotics the most effective way to diagnosis and treat ARDS based on evidence?

Literature Search Strategy: The literature search process used Pubmed, Google Scholar, Current Medical Diagnosis and Treatment, Up to Date. Search terms used to locate the appropriate literature were adult respiratory distress syndrome, acute respiratory distress syndrome, refractory hypoxemia, treatment for ARDS, new treatment methods for ARDS.

Literature Search Results & Evidence: The literature search produced an initial total of 974 studies. Eliminated studies were those that did not include inpatients in a hospital setting, related to trauma related injuries, rare viral or bacterial causations and studies that did not include follow up results. Most cases of ARDS are associated with pneumonia or sepsis. The standard treatment of ARDS includes starting in any ventilator mode with tidal volumes of 8 mL/kg predicted body weight in kg, PEEP least 5 cm H2O, FiO2 to maintain an arterial oxygen saturation of 88-95% and a PAO2 of 55-80. The standard of care for ARDS was noted to be consistent throughout the literature review. Studies included the standard inverse ratio mechanical ventilation and systemic steroids to decrease inflammation and intravenous fluid conservation to prevent fluid overload and demand to the lungs. The evidence proves that the low tidal volume mechanical ventilation continues to be the best practice guidelines for ARDS patients. The additional treatment modalities were showed lack of evidence toward the recovery.

Evidence from Clinical Case: The patient presented to an outside hospital with SOB and a chest Xray with bilateral infiltrates. The patient progressed to needing mechanical ventilation and a tracheostomy for long term mechanical ventilation. Supportive nutritional care was added along with speech and physical therapy and eventually the patient was transferred to a rehabilitation facility closer to home. The standard treatment for ARDS was successful for this patient. Although his stay was lengthy, he eventually was able to have his tracheostomy removed and passed his swallow study evaluation. Upon discharge, he did not require any oxygen supplementation and only needed physical rehabilitation to resume his activities of daily living.

Comparison and Synthesis of Evidence: The articles and guidelines in the literature search along with the clinical case study prove that the standard treatment modality for ARDS which is low tidal volume and increased peep remain the gold standard. The evidence matches the guidelines and thus should remain in the practice guidelines. Other evidence proves that prophylactic systemic steroids or steroid use during ARDS does not aid in the recovery of the ARDS patient. Intravenous fluid management remained undetermined in regards to recovery of ARDS. This specific case review study had a positive outcome.

Conclusions and Implications for Nursing Practice: The combined evidenced from the literature and clinical case study with the patient demonstrated that low tidal volume, high PEEP mechanical ventilation and supportive care through nutritional support, physical therapy, speech therapy, stress ulcer prophylaxis and DVT prophylaxis can result in positive outcomes for adults with ARDS. As an APRN, quick diagnosis of ARDS needs to be established. Treatment of the underlying cause, prevention of further complications from the disease and initiation of supportive care for patients are just a few of the goals for patients with ARDS. As an APRN, continuing to research and keep updated on the most recent treatment modalities along with interprofessional teamwork are key standards for anyone who practices medicine.
Abstract #: 044

Uthanasia and Physician Assisted Suicide: Attitudes of Various Populations
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**Background:** Euthanasia and physician assisted suicide; globally controversial and highly debated topics for quite some time, still remain hot button issues today. As might be expected, views of whether these are ethical practices, and ones that should or should not be legalized, varies drastically among different cultures, religions, genders, races and regions of the world. Euthanasia is the administration of lethal drugs by a physician or other third party and discretion on when to do so.

**Purpose:** The purpose of this study was to obtain views and attitudes of various populations in regards to euthanasia and physician assisted suicide.

**Method:** This is a qualitative study of 5 journal articles. Upon reading the articles, I organized a summary of the results.

**Results:** Despite the trends that emerge among various groupings, each individual is likely to have their very own opinions and reasons as to why they feel the way they do regarding such a potentially serious and poignant matter. Whether or not the subject has ever had any direct involvement with either of these issues will directly affect their attitude towards it, those having had involvement tend to have more deeply rooted and emotional attitudes and beliefs. Among palliative care nurses, identified trends include how extreme is the level of pain being experienced by the patient as well as what can be done to control that pain. As a majority rule, this population agreed that once the pain is so great as to removed quality of life for the patient, as well as there being no means to ever alleviate the pain, at that point PAS or Euthanasia would become a realistic and potentially necessary option. Outside of the patients themselves, it could be said that the opinions of health care providers that are directly involved with these situations, have the most clear and unbiased perception of any population. Of severely ill patients, a marked majority of them spoke about their feelings on the importance of autonomy, that is “their life, their choice” essentially. These patients largely feel that at the nearly end of their life, when it has come to this, at the very least they deserve to have a choice to end it themselves. Patients in countries or states where PAS is not legal often battle with means in which to end their lives without incriminating their families or causing them added grief or pain. Those with firsthand experience regarding the potential utilization of Euthanasia and Physician Assisted Suicide make valid points. Generally speaking, the rest of the population is in favor of the legalization of Euthanasia and PAS but only by a slight margin of about 60% on average. Various reasons of being for or against are less clear about the results of the quantitative studies. Based on analyses of the different segments of the population, it would appear as though race, religion, gender, political affiliation and cultural background are the greatest influencers on the attitudes of the various groups that were surveyed.

**Conclusion:** Upon completion of the review of these pieces of literature, it was found that while Euthanasia and Physician Assisted Suicide are highly debated, widely known and prevalent topics, there are still many populations and masses of people that could be surveyed or their attitudes gauged. It seems as though many people are in favor of the terminally ill having these choices, but that no one is exceptionally proactive in taking the necessary steps towards proposing legislation regarding the legalization and implementation of Euthanasia and PAS. If larger numbers of people were made aware of the research that already exists and the struggles that are faced by some of these terminally ill patients, reason for taking initiative would be much greater. In regards to nursing, members of this profession could be very useful in the gathering of further research. Also, their perspective and insight regarding this issue is invaluable in regards to necessity and prevalence of just how widely useful that Euthanasia and Physician Assisted Suicide could actually be. These topics are not as much on the forefront as they once were and it appears as the dust surrounding them has cleared, so to speak, so has the interest in furthering the research regarding these issues.

**Implications for Nursing:** With these procedures already being legalized in some areas, it is important for nurses and all healthcare professionals to stay informed with the changing views and laws regarding these procedures.
Abstract #: 045

Patient and Family Centered Care in Action: The UAMS NICU Sibling Support Program

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**Problem and Purpose:** It was recently discovered that little resources existed which acknowledged the youngest of family member’s contribution to patient care. The UAMS Neonatal Intensive Care Unit (NICU) thus developed a Sibling Support Program (SSP) aimed at incorporating siblings into the care of their sick/premature baby brother/sister. The purpose of this Evidence Based Practice (EBP) project is to evaluate the extent to which this newly implemented outreach program effectively applies PFCC to the NICU sibling population.

**PICO Format Question:** Amongst siblings of NICU patients, does participation in the SSP, as compared to pre-existing, standard visitation practices and interactions, yield an increased understanding of the NICU environment, improved sibling bonding, and an overall integration into patient care?

**EBP Model/Process:** The ACE Model of Knowledge Transformation provided the framework for this evidence based practice project.

**Relevant Literature:** A review of current literature consistently noted that siblings have an important support role with their brothers/sisters that can often outlast that of parents or service providers, however, frequently do not have access to multiple professional resources that parents are often afforded. Additionally, siblings of newborns hospitalized in an intensive care environment were found to experience a complex emotional-behavioral response, and often lack the ability to effectively adapt to this situational crisis. Thus, there often exists a gap between a sibling’s need for information and the necessary resources to assist with sibling understanding and adjustment.

**Method:** Parents of siblings who participated in SSP activities were asked to complete feedback cards after speaking with their child about his/her experience.

**Outcomes:** Quantitative analysis was performed on responses to feedback cards completed by parents of siblings who participated in a SSP sponsored program or activity (n=15). A total of 93% of families rated the overall program as “Excellent.” Similarly, 93% felt the SSP content was age appropriate.

**Conclusions and Recommendations:** The results of this study demonstrate how a structured program can effectively provide age appropriate, valuable resources which allow for PFCC core values to materialize at the bedside, where important patient interactions and teaching often occur.

**Implications for Nursing Practice:** A structured program such as the SSP provides valuable resources which allows for PFCC core values to materialize at the bedside, where important interactions and teaching often occur.
Abstract #: 046

**Baby Boomer’s**
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**Significance:** Baby Boomer’s effect on health care is no new phenomenon. The Baby Boomers not only effect health care but the labor force as well. Healthcare in the United States is facing many challenges by trying to accommodate for the Baby Boomers and their various tribulations. With longer lifespans comes increased dilemmas and risk factors. These predicaments have arisen and been addressed by the boomers themselves. The health care system has taken these individuals views and opinions into consideration in every aspect of their care.

**Problem (or Purpose):** People are working longer due to the cost of living, the cost of insurance, prescriptions, and are unable to live without all of the above. With increase lifespans comes the challenge is to help them stay healthy and maintain a high quality of life at every age.

**PICO Format Question:** Will the people from this large generation be able to afford the care they require? What do they define as quality of life?

**Search Strategy and Quality Screening:** Articles pertaining to Baby Boomers were found in EBSCO Host. I searched Baby Boomers as my main topic, with subtopic searches consisting of the key words, nursing, healthcare, and effects on healthcare. Search years had a limited range, from 2008-2013.

**Evidence:** The search produced many articles consisting of Baby Boomers though the data within many articles were not relevant to the aim of my paper.

**Synthesis of Evidence:** “Over the past century in the United States alone, the proportion of persons aged 65 or older increased more than threefold, from 4.1% to 12.9%” (Anderson, 2012). By 2030 approximately 20% of American’s will be age 65 or older. Public health care needs to be prepared to care for this rapidly growing and aging population. Not only are health cost rising but the need for working peoples to help care for elderly parents are increasing. With longer lifespans the challenge is to help them stay healthy and maintain a high quality of life at every age, regardless of the onset of chronic conditions. Aging is affected by modifiable factors as well as genetics. “Although physical disease and associated costs tend to receive the higher attention, mental health, typically measured as depression, well-being or life satisfaction, is essential to quality of life as one ages” (Musich, 2009). Successful aging requires an individual’s self-responsibility in managing medical conditions, maintaining healthy lifestyle behaviors and positive attitudes. Older adults are often faced with the decision of whether to remain living at home or move into an institutional facility. Chronic health conditions can complicate matters even further. This large cohort of aging Baby Boomers is predicted to put an overwhelming demand on healthcare services. “Attempts to control health care costs through cutting or freezing rates (or at a minimum increasing them at levels below corresponding cost increases) results in a phenomenon we describe as revenue compression” (Devine, 2008). It is more important now than ever that health care providers not only manage costs, but more importantly manage their services, customer and investment decisions more effectively in order to survive and flourish in this environment.

**Conclusions and Recommendations:** Health care organizations must recognize that they cannot be all things to all people if they plan to continue to survive and flourish in today’s health care. The consequences of having a larger, more diverse elder population will be dramatic, notably from an economic standpoint. Housing and health care sectors have made drastic changes across the country to accommodate these boomers as they age. As the number of older adults continues to grow, public health professionals will have to find innovative ways to meet the multiple needs of this generation. Also, a quandary has arisen pertaining to the shortage of professionally trained and educated personnel on the topic of caring for the elder population. This deficit must be addressed if the health care system stands a chance at fulfilling the needs of the elder population.

**Implications for Nursing:** Not only are health cost rising but the need for working peoples to help care for elderly parents are increasing. Nursing are going to have to be advocates for patients and perform referral for the elderly population in order to increase their quality of care. Educating these clients of modifiable health risks could potentially extend their life as well as their quality of life. Also, their options as far as HMT’s, home health, and assisted living would give them a sense of autonomy.
## Elder Abuse

**Elder Abuse**

Chelsey Laine May

### Significance:
Elder abuse is very prevalent in our society yet often goes unnoticed because it often goes unreported. Elderly adults run a high risk for abuse because as a population dependent on their caregivers, they must rely on others to meet their basic needs for survival. Understanding what constitutes elder abuse and identifying the risk factors that lead to elder abuse and put the geriatric population in danger of neglect can be a vital tool to health care providers.

### Problem:
Drug and alcohol abuse, decline in cognition, as well as gender, appear to play a major role in the abuse of elderly people. Extra precautions should be taken when dealing with this population to ensure they do not become the subject of maltreatment by family or caregivers.

### PICO Format Question:
Among elderly adults what are the factors that put them at risk for abuse?

### Results:
Alcoholic abuse by the perpetrator is also strongly associated with elder abuse. Cognitive impairment of the elderly significantly correlates with abuse and increased incidence of cognitive impairment is associated with a high level of psychological distress. The decline in cognitive function has a significant connection with geriatric abuse. Victims of elder mistreatment are more frequently females. Also, single women that live with a family member that provides their care are more likely to suffer neglect. The older female population should be aware of this common occurrence and should seek trustworthy caregivers or have a backup plan in mind if any abuse occurs. Taking extra precautions with patients can stop elder abuse from continuing and lead to reduced occurrences of elder abuse. One way to monitor for any abuse is a regular physical checkup. A proper head-to-toe assessment of the elderly patient should alert the nurse to any signs of possible maltreatment.

### Conclusions:
Elder abuse can range from psychological abuse such as isolation, to physical abuse such as striking or hitting or even just basic neglect of needs. Research that identifies risk factors such as alcohol abuse, decline in cognition, and gender can help nurses look for and recognize signs of abuse. Precautions that have been established to improve the care of the elderly such as building trusting relationships with nurses can also decrease the occurrence of abuse.

### Implications for nursing:
Knowing what elder abuse is, the risk factors research has associated with it, and which precautions can be used in lowering the occurrences of abuse is imperative to the field of nursing because this research directs us towards carrying out the best possible care for the geriatric population.
**Interventions to Promote Diabetes Regimen Adherence**

Cheryl Wells, Cassandra McConnell, and Tyler Boren  
University of Arkansas at Monticello

**Significance:** Poor compliance and adherence to treatment regimens for type 2 diabetes mellitus (T2DM) is associated with higher levels of morbidity and mortality and increased healthcare costs.

**Purpose (or Problem):** The purpose of this review was to determine what interventions are effective to increase treatment adherence.

**PICO Format Question:** In T2DM patients older than 18 years, what interventions are effective to promote treatment adherence and lifestyle changes and improve HbA1c?

**Search Strategy and Quality Screening:** Searches were conducted using CINAHL Complete and the search terms: *diabetes, nutrition, compliance, adherence, and depression* and the BOOLEAN operator AND. Results were limited to full text research journal articles in English published 2009-2014.

**Evidence:** Search returned 152 related articles. Nine study reports met all inclusion/exclusion criteria and were quality critiqued, resulting in a final sample of six research reports. The sample included two qualitative systematic reviews, a mixed-method study, two quantitative cross-sectional studies, and a quantitative quasi-experimental study. Settings included studies from the US, Finland, UK, Netherlands, Ireland, Brazil, South Korea, and Iran. Population included patients with T2DM over the age of 18 years, with one study limiting participation to individuals ≥40 years.

**Synthesis of Evidence:** The evidence showed some positive correlations with tele-nursing, electronic pill caps, decisional aids, tailored interventions, group education programs and adherence to treatment regimen with a reduction in HbA1c. Statistically significant associations were found between adherence to diet plan and physical exercise. Greater adherence to T2DM treatment regimens with interventions showed positive effects on HbA1c levels, blood pressure and cholesterol.

**Conclusions and Recommendations:** Further research is needed identify which interventions are most effective at increasing adherence to diabetes treatment and what are the long-term effects on these interventions.

**Implications for Nursing Practice:** Interventions may be more effective than usual care practices at increasing adherence to diabetes treatment regimens including medication adherence, physical activity, and diet adherence. Adherence to treatment regimens has been shown to have a positive impact on HbA1c, blood pressure, and cholesterol.
# NURSING COMPETENCIES FOR GERIATRIC CARE

Clair E. Roden  
South Arkansas University

**Significance:** People are living longer and the elderly are the largest population that nurses care for in terms of hospital stays, home-care settings and nursing home patients. There were Nineteen Gerontological Nursing Competency Statements identified and introduced as part of the John A. Harford Foundation’s Hartford Geriatric Nursing Initiative in 2001 as a result of this shift in society.

**Purpose (or Problem):** New nurses and seasoned nurses face the daunting task of learning and applying nineteen new competencies for the growing geriatric population.

**PICO Format Question:** Are current nurses and nursing students prepared to handle the growing population of geriatric patients?

**Search Strategy and Quality Screening:** The literature search process used EBSCO, Pre-CINAHL, MEDLINE. The research sites were used to search the key words geriatric competencies, geriatric nursing, and continuing education using the Boolean operator AND. The peer review research articles were chosen from the published works from 2005-2013.

**Evidence:** The initial search produced 157 articles. The 157 articles were then narrowed down to five articles that were within my criteria. The Nineteen Gerontological Nursing Competency Statements published by the John A. Harford Foundation’s Hartford Geriatric Nursing Initiative were also utilized.

**Synthesis of Evidence:** The articles reviewed identified that in order to improve geriatric nursing care there are three major areas that need to be focused on when applying the new competencies, education, communication and safety. Studies have shown that geriatric nursing staff spends the majority of their time on communication and direct patient care. It is critical that school curriculums expose new nursing students to the differences between caring for geriatric patients and caring for the average patient. The average nurse already in the workforce is faced with the challenge of not only being charged with providing care for a growing geriatric patient population, but also finding the time to educate, communicate and apply the new competencies to its own aging workforce.

**Conclusions and Recommendations:** Education and communication is the key to providing family members and medical professionals with the proper tools for care and treatment of older patients while also keeping them safe.

**Implications for Nursing Practice:** The geriatric competencies improve the care and treatment of this portion of the patient population.
### Physical Abuse and Neglect of Elders in the Context of Family

Connie Brown BSN, RN  
University of Arkansas for Medical Science

#### Significance:
An estimated 4 million older Americans suffer from physical, psychological, or other form of abuse annually (American Psychological Association). Experts estimate that for every case reported to authorities, 23 cases go unnoticed. Most incidents occurred in the home with adult children and spouses or significant others as leading perpetrators.

#### Purpose (or Problem):
Elders were often reluctant to disclose abuse or prosecute perpetrators in fear of retaliation or being institutionalized. Some felt responsible for family behavior. Others wished loved ones no harm.

#### PICO Format Question:
How may nurse practitioners effectively identify, treat, and/or prevent physical abuse and neglect of elders in the context of family members?

#### Search Strategy and Quality Screening:
Google Scholar Advanced Search, Cochrane via Ovid, CINAHL, and PubMed were searched for literature pertaining to elder abuse, its identification, treatment, and prevention. Search terms included elder abuse, family elder abuse, identifying elder abuse, treating elder abuse, and preventing elder abuse.

#### Evidence:
The initial search returned over 35,500 articles. Search years were limited to 2004-2014. Articles were further limited to research, full text, abstract, and evidence based. Search terms identification, treatment, and prevention were combined with terms family and abuse. Ten research articles were retrieved and reviewed.

#### Synthesis of Evidence:
Direct questioning, observation of evident signs, and screening for risk factors were tools primarily used to identify abuse. Knowledge of risk factors, characteristics of abusive caregivers and care recipients, legal obligations, and community resources were essential to providing treatment. The treatment and prevention of abuse was based upon the Ecological Model, which included the elder’s family, culture, values, institutional or informal support, and environment.

#### Conclusions and Recommendations:
There were numerous reasons and circumstances surrounding elder abuse. None were justifiable. Effective interventions must focus on supporting victims as well as their caregivers.

#### Implications for Nursing Practice:
All health care providers should know risk factors for elder abuse, signs of abuse, characteristics of victims and perpetrators, and ways to prevent its’ occurrence. The onus is upon practitioners to screen, report, treat, and prevent elder abuse.
## The Impact of Diversity on the Care of Older Adults

Danielle Christine Iverson  
Magnolia Regional Medical Center

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<th><strong>Background:</strong> Diverse older adults are at risk for poor quality in health care and being uneducated on how to promote their own wellbeing.</th>
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<th><strong>Purpose:</strong> The purpose of this study is to inform diverse patients and their nurses on how to promote competent healthcare and promote wellbeing in these patients.</th>
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<th><strong>Method:</strong> The older adults featured in the articles reviewed range from affluent individuals who have private health insurance, to poverty stricken senior citizens who rely on Medicare to take care of their healthcare needs. Socioeconomic status plays a large role in the healthcare decisions and healthcare options of the elderly. Race, ethnicity, and even sexuality also play a major role in the decision making process of the older adults involving medications, services, and other aspects of healthcare. Just as the human race is a diverse group, so too are older adults. Though some older adults are limited by lack of funds or health insurance, other senior citizens simply choose different treatments and practices based on past experience, personal preference, family influence, and a wide variety of other factors.</th>
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<th><strong>Results:</strong> African American and Hispanic elderly adults were more likely to use CAM therapy. Diverse elderly patients were more likely unavailable to insurance, therefore less likely to receive care in a hospital or doctors’ office. They were also less likely to receive vaccinations Discrimination was also found to be a major factor in influencing less competent care. Patients that were homosexual or transgender fear of being discriminated against and judged by health professionals therefore are less likely to seek care.</th>
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<th><strong>Conclusions:</strong> Services must be accessible and acceptable to all Americans, regardless of their racial and ethnic background, language, education level or financial situation. Cultural competence is critical. Uneducated, poor, elderly minorities are simply not getting the preventative healthcare they so desperately need in order to maintain quality of life long-term. It is important that those people in the healthcare field, especially nurses take an interest in the well-being of elderly individuals.</th>
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<th><strong>Implications for nursing:</strong> Educate patients of effects of poor health care. Services must be accessible and acceptable to all Americans, regardless of their racial and ethnic background, language, education level or financial situation. Cultural competence is critical. It is important that nurses take interest in the wellbeing of diverse elderly patients.</th>
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**Diagnosis and treatment of right cavitary lung lesion: A nocardia case study**

Davon Lackie, RN, BSN, CCRN, AG-ACNP student; Jason Holder MD

University of Arkansas for Medical Sciences, College of Nursing, St. Vincent Infirmary Medical Center

**Clinical Significance:** While right cavitary lung lesions warrant further diagnosis and treatment based upon etiology of the lesion, this can sometimes prove difficult. Nocardia infections are challenging to diagnose. This is not only because of the evolving species taxonomy, but also due to slow growth of the bacteria in culture medium. The clinical symptoms range by primary infection site and manifestations can be nonspecific. Nocardiosis is generally a recurring infection; therefore, if the initial infection is treated inadequately, death may ensue with subsequent infections. Also, treatment options are not well established and with increasing numbers of diagnosis, definitive guidelines should be made.

**PICO Format Question:** In patients presenting with pulmonary manifestations, which methods have been suggested to diagnose and treat Nocardia based on evidence?

**Literature Search Strategy:** The literature search process used Pubmed, Ovid Full Text Journal and EBSCO. Search terms used to locate the appropriate literature were pulmonary manifestations, pulmonary, Nocardia, diagnosis and treatment.

**Literature Search Results & Evidence:** The literature search produced an initial total of 129 articles. After eliminating duplicate studies and those with pediatric patients, 10 articles were left. Nocardia treatment regimens require prolonged antibiotic therapy with some antimicrobial resistance reported. Because of the multiple organs that this infection can affect, it frequently mimics other diseases. Pulmonary Nocardia manifestations are generally diagnosed through biopsy, but specific species must be isolated. Most disseminated cases have a primary origin site as pulmonary Nocardiosis, so studies suggest any patient presenting with pulmonary manifestations get brain imaging to rule out central nervous system involvement. Antimicrobial therapy is tailored to specific Nocardia species, but in the past treatment with trimethoprim-sulfamethoxazole (TMP-SMX) has been the drug of choice. There is a lack of evidence on diagnosis and guidelines regarding specific successful treatment for patients presenting with pulmonary manifestations of Nocardia infections.

**Evidence from Clinical Case:** This case involved diagnosing a 67 year old gentleman with CT guided fine needle aspiration of right fluid filled cavitary lung lesion with Nocardiosis via biopsy and sputum cultures. This was congruent with the literature reviews of pulmonary nocardiosis diagnostic methods. Specific treatment for Nocardia was delayed as was the case in many of the reviewed studies. Treatment guidelines in the literature search are specific to the type of Nocardia species, but many suggest TMP-SMX. The literature review reported some antimicrobial resistance to TMP-SMX. The patient was sent home on a continued dose of oral prednisone therapy, which competes with most of the treatment guidelines in the reviewed articles. Also, studies suggested MRI of brain for pulmonary manifestations, but this was not done in our case study.

**Comparison and Synthesis of Evidence:** The articles and guidelines in our review and case study both suggest biopsy and culture of pulmonary manifestations of Nocardia produces an accurate diagnosis. Treatment in the review of literature suggests many different antibiotics can be used to produce effective results; however, effective antibiotic coverage was unable to be given in our study because of final diagnosis delay.

**Conclusions and Implications for Nursing Practice:** Because Nocardia infection can lead to death, it is essential that practitioners suspect this diagnosis and initiate treatment with continued antimicrobial therapy in any immunocompromised patient with signs of infection. Treatment with antimicrobials that is tailored to susceptibility patterns of specific Nocardia species should be implemented. Given the growing number of transplant patients and exponential years of life added to HIV infected individuals with current medications, practitioners must think about the rising opportunistic infections due to the Nocardia species.
# The Effect of Reminiscence Storytelling and Geriatric Clients

Deanna Sirmans  
Nursing Student at Southern Arkansas University

**Significance:** Reminiscence can have many goals. It not only provides pleasurable experience that improves quality of life, but also increases socialization and connectedness with others, provides cognitive stimulation, improves communication, and can be an effective therapy for depressive symptoms.

**Purpose (or Problem):** To deliver patient centered care, nurses need to communicate in order to understand. If they understand patients, even to the smallest degree, nurses are better able to plan care which meets the needs of the individual and to display the characteristics of nursing which are so highly regarded by patients and practitioners alike: compassion, empathy, care and understanding. In order for us to understand our patients we need to listen, not just listen, but listen carefully. Our geriatric patients are trying to share their lives with us, through reminiscence, and we need to listen so we can understand and help them fulfill their stages of development.

**PICO Format Question:** Does reminiscence or storytelling help the geriatric client and/or the nurses involved in their care?

**Search Strategy and Quality Screening:** The literature search process used EBSCO, Science Direct, and CINAHL Database. Search terms used to locate appropriate literature were reminiscence, geriatric, and storytelling. Search years were limited: 2008 - 2013 and article types were limited to peer-reviewed research articles.

**Evidence:** Of the articles found, seven of them were used to compile a review of the literature paper stating the significance found in storytelling and the geriatric client.

**Synthesis of Evidence:** The studies conclude that reminiscence and storytelling not only provide pleasurable experiences that improves quality of life, but also increases socialization and connectedness with others, provides cognitive stimulation, improves communication, and can be an effective therapy for depressive symptoms.

**Conclusions and Recommendations:** For the geriatric client to achieve integrity they must believe that their lives have been productive and this can be achieved by reminiscence of their life and acceptance of what they have accomplished. So in order for us to understand our patients we need to listen, not just listen, but listen carefully.

**Implications for Nursing Practice:** When we as nursing professionals are caring for our geriatric clients we need to listen carefully to what they are saying to be able to provide patient centered care for each individual.
## The Challenge of Diagnosing and Treatment of Low Risk Chest Pain: A Case Study

Debbie Evans RN, BSN, AG-ACNP student  
University of Arkansas Medical Sciences College of Nursing

**Clinical Significance:** Treating adult patients with low risk chest pain is challenging and can vary with each patient. Patients presenting to the Emergency Room (ER) with chest pain symptoms need guidelines established for faster data collection to stabilize the patient. Patients can report with very vague symptoms that if not assessed early can turn into life threatening consequences very fast. Evidence based guidelines show that for patients having an acute myocardial infarction the coronary arteriogram is the best intervention, but more guidelines are needed for the patients presenting with more vague symptoms.

**Clinical Significance:** Treating adult patients with low risk chest pain is challenging and can vary with each patient. Patients presenting to the Emergency Room (ER) with chest pain symptoms need guidelines established for faster data collection to stabilize the patient. Patients can report with very vague symptoms that if not assessed early can turn into life threatening consequences very fast. Evidence based guidelines show that for patients having an acute myocardial infarction the coronary arteriogram is the best intervention, but more guidelines are needed for the patients presenting with more vague symptoms.

**Statement of the Problem (or Purpose):** The purpose of this work was to explore evidence from literature and practice guidelines in the hospital setting experience to evaluate low risk chest pain.

**PICO Format Question:** In adult patients presenting to the ER with low risk chest pain, is the standard treatment with non-invasive or invasive ischemia evaluation the most effective way to diagnose and treat their chest pain based on evidence?

**Literature Search Strategy:** The literature search process used Google Scholar. Search terms used to locate the appropriate literature were low risk adult chest pain, chest pain in the Emergency room, and adult chest pain with stress testing.

**Literature Search Results & Evidence:** The literature search provided 17,000 studies. Eliminated studies were those that did not include stress testing. The evidence shows that chest pain can be treated by non-invasive evaluations in patients presenting without acute myocardial infarction. This includes stress testing that can be done in a clinical or hospital setting depending on patients presenting symptoms and baseline assessment. Literature shows that patients presenting to the ER will need appropriate testing to make sure they are not discharged too early, preventing a liability and mortality. When testing is negative patient is discharged and if any abnormal testing is found an admission should be the next step in treatment. This approach states that it is safe and effective with patients presenting with low risk chest pain. The ability for a clinical provider to do a complete assessment and identify proper testing in a fast, cost effective process for the institution and patient, provides the best outcome for the low risk patient presenting with chest pain.

**Evidence from Clinical Case:** We treated a patient using the chest pain observation guidelines. He presented with vague symptoms and baseline cardiac enzymes were negative. While patient was in observation status he had an episode of acute chest pain with shortness of breath. With these symptoms the non-invasive testing was found not applicable in this situation. The physician ordered a cardiac catherization which showed significant stenosis and an intracoronary stent was placed.

**Comparison and Synthesis of Evidence:** The articles and guidelines in our literature search together with our clinical experience demonstrate that low risk chest pain guidelines are adequate as well as accurate and cost-effective in the treatment of low risk patients presenting to the ER. Evidence outlines the guidelines have proven to be accurate and cost-efficient.

**Conclusions and Implications for Nursing Practice:** The combined evidence from the literature shows that a thorough assessment combined with an ischemic evaluation provides the best outcome.
**Abstract #:055**

**Literature Review: Peripheral IV Access Teams in Hospital Settings**

Deborah Johnson, M.Ed., BSN, RNP, RN-BC  
UAMS

**Significance:** When staff nurses exhaust their options for obtaining peripheral intravenous access for patients, what other sources are available? One solution might be the use of a Peripheral IV Access Team designated on each shift to respond to requests.

**Problem (or Purpose):** To address staff inquiry about feasibility and evidence supporting the use of IV Access Teams

**PICO Format Question:** Is there evidence-based practice available to support the use of peripheral IV access teams in hospitals?

**Search Strategy and Quality Screening:** The literature search process used PubMed, CINAHL, and Google Scholar. Search terms used were barrier, delivery of care, procedures, standards, effective IV access, and IV teams. Searches were limited to English only and the last ten years. Searches excluded nursing homes and pediatrics.

**Evidence:** The literature search initially produced 144 studies, and from that 25 were reviewed, and 16 were pertinent to discussions regarding peripheral intravenous care.

**Synthesis of Evidence:** The articles and guidelines in this literature search demonstrate the need for standardized IV practices, quality management, and cost effective use of resources to decrease the time and number of insertion attempts, and reduce complications from IV therapy.

**Conclusions:** The combined evidence supports the results of evidence-based practices for initiating and maintaining peripheral IVs. However, additional studies are needed to demonstrate the success rate and cost effectiveness of IV teams in hospital settings.

**Implications for Nursing Practice:** The insertion and maintenance of peripheral IV’s require standardized protocols and evidence-based practice to reduce complications, provide timely responses, and enhance quality outcomes for patients. Continued evaluations and process improvements with the possible use of IV access teams will require further study.
### Hospitals benefit from offering graduate nursing residency programs

| Authors | Dena Jones  
|---------|-------------
| Institution | BSN student at Southern Arkansas University- Magnolia |

#### Significance
New nurses are having difficult times finding employment due to most hospitals want to hire nurses with experience only. The cost to train a new nurse is very expensive for the hospital and the retention rate for new graduate nurses is low. The turnover cost for a RN is estimated at to be $8,000 to $62,000. Hospital that offer new nurses a residency program which are designed to take a new nurse graduate and make him/her into competent and confident nurse professional nurse improve their nursing retention rate. A nurse residency programs although cost a little in the upfront cost end up saving the hospital millions of dollars.

#### Purpose (or Problem)
There is an abundance of new graduate nurses without jobs and hospitals are short on experienced nursing staff.

#### PICO Format Question
Will hospitals offering graduate nursing residency programs be able to fill vacant nursing positions and save money?

#### Search Strategy and Quality Screening
Using the CINAHL and Science Direct website via the Magale Library at Southern Arkansas University, a search was made using benefits of graduate nursing programs.

#### Evidence
Peer reviewed research articles, and five articles were used for this paper.

#### Synthesis of Evidence
Evidence shows that hospitals that offer nurse graduate residency programs will have an upfront cost but that cost is an investment because hospitals will save millions of dollars. Hospitals with nurse graduate residencies have a dramatic increase in their nurse retention rate.

#### Conclusions and Recommendations
By adding graduate nurse residency programs hospitals can save money, fill vacant nursing positions, and increase their nurse retention rate.
## Automatic versus Manual Blood Pressure cuffs; does it matter?

Amanda Erwine; Derek Scrivner; Toby Hutchins; Brittany Cordero  
Henderson State University Nursing Program

### Significance:
Blood pressure measurements are a staple of the nursing field. They are performed regularly and are the basis for many medical decisions. Therefore, it is crucial that these measurements are accurate to provide the best possible patient care.

### Purpose (or Problem):
To determine if automatic blood pressure cuff readings are more accurate than manual blood pressure cuff readings.

### PICO Format Question:
In hospitalized patients, does using an automatic blood pressure cuff result in more accurate readings than using a manual blood pressure cuff?

### Search Strategy and Quality Screening:
The databases MEDLINE and CINAHL were accessed through Henderson State University’s Huie Library. Boolean/phrase was used as the search strategy. Key words included: hospital, patients, automatic, manual, blood, pressure, cuff, and accuracy. From here we expanded our search to include full-text articles. We also limited the search by dates of publication (01/1999 – 09/2013), full text, abstract available, English language, and peer reviewed. The search resulted in 3,165 articles and from those we chose three research studies and one systematic review.

### Evidence:
From the above search, we selected four peer-reviewed articles. These articles served as the source from which our conclusions were derived.

### Synthesis of Evidence:
Manual sphygmomanometers not maintained properly. Automated devices result in inaccurate readings. Properly maintained manual sphygmomanometers result in more accurate readings than automated devices.

### Conclusions and Recommendations:
Inaccuracy of the Dinamap 1800 does not support the trend of using automated devices rather than the traditional manual sphygmomanometers. Better to use a properly working and maintained manual blood pressure cuff correctly than an automated device. Other factors that also contribute to accurate readings are: the user’s knowledge, cuff size, cuff deflation rate, pulse rate, artery movement, etc.

### Implications for Nursing Practice:
Be aware that an automated device can lead to an inaccurate reading. If doubts arise about an automated reading, re-take with a manual device and get checked by an experienced colleague.
**Abstract #:058**

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<th>Direct Care Nurse Staffing</th>
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<td>Diane Wood, Tammy Bowen</td>
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<td>University of Arkansas for Medical Science</td>
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**Significance:** In 1996, the Institute of Medicine reported the lack of research linking nurse staffing with patient outcomes. This increased research but produced inconsistent data. With the advancement of health information systems, more data is available to help investigators explore the impact of patient physiological measures with staffing and patient outcomes.

**Purpose (or Problem):** The purpose of this literature search is to obtain evidence that nurse staffing based on patient acuity leads to better patient outcomes.

**PICO Format Question:** In acute care facilities, does nurse staffing based on patient acuity improve patient outcomes as compared to staffing models based on hours paid per patient day and patient census?

**Search Strategy and Quality Screening:** We searched ScienceDirect, CINAHL Plus, Google Scholar and PubMed for evidence using the terms: nurse staffing, nurse-to-patient ratios, staffing, patient outcomes, patient classification, acuity, acute care hospitals, evidence-based, staffing model, medical/surgical and patient safety. These terms were combined ways using the Boolean operator AND. Search years were limited to 2007 through 2013. The articles were limited to research and evidence-based articles. Inclusion criteria were any research articles utilizing the search terms listed above in acute care adult inpatient units. The exclusion criteria were specialty-based units or facilities, children, and long-term, non-acute care facilities. Quality screening included outcomes listed as infection rates, failure to rescue, decubitus ulcers, death, length of stay, mortality.

**Evidence:** The Databases search produced the following articles: ScienceDirect - 32 articles, 2 CINAHL Plus-239, Goggle Scholar over 1600 and PubMed 69. This resulted in two systematic reviews; two cross sectional studies and two published professional practice guidelines.

**Synthesis of Evidence:** All articles indicated that increased nurse staffing ratios improved patient outcomes. These outcomes included decreased length of stay, decreased infection rates and decreased mortality rates. However, stronger research studies are

**Conclusions and Recommendations:** The guidelines for the American Nurses Association (ANA) and the Professional Registered Nurse Staffing for Perinatal Units (AWHONN) advocate for improved staffing ratios. However, these guidelines indicate that no single method, model or matrix is appropriate for every patient care setting. As a result, each organization should develop a staffing model that is appropriate for their patient population.

**Implications for Nursing Practice:** This evidence suggests improving nurse-patient ratios by acuity staffing leads to better patient outcomes. Revising the current staffing policy should consider the acuity of the patient, daily census and nurse educational level. Due to the initial cost of increased staffing, this policy may meet some resistance from hospital administration. However, a discussion of cost savings from improved patient outcomes will help persuade administrators that the initial cost of increased staffing outweighed by improved patient outcomes.
**Older African Americans and Planning for the End of Life: Exploring the Influence of Trust in the Health Care System**

Donna J Elrod  
University of Arkansas for Medical Sciences College of Nursing

**Background:** African Americans participate less in formal advance care planning than other population groups in the United States. While widely accepted as present in the African American population, mistrust of the health care system remains poorly understood as an influence on the choices of African American patients and significant others at the end of life.

**Purpose:** The purpose of this pilot study was to determine the feasibility of conducting a qualitative study in the older African American population and to obtain initial data regarding the influence of mistrust in the health care system on formal end of life care planning the older African American population in the South.

**Method:** Interviews were conducted in the descriptive study using an interview guide developed from the literature and with the mentorship of an expert in qualitative research. Participants were recruited using flyers at a medical center in the South. The researcher obtained written consent an HIPAA authorization, demographic information including sex, year of birth, marital status, educational level, race, and possession of an advance directive document. The researcher read and completed the demographic questionnaire with the participant in order to increase rapport and trust prior to the interview. The researcher conducted all interviews and transcribed the audio recordings. The interviews were analyzed using constant comparison and content analysis and a code book was developed. First level and second level coding was completed on each interview and a data table was constructed to show themes. The research protocol was approved by the UAMS Institutional Review Board.

**Results:** The sample consisted of 6 female, predominantly married, African Americans. Ages ranged from 42 – 74 and educational levels ranged from 11th grade to a PhD. All reported living in the South for 40+ years. They reported they would choose family members to make decisions for them. Preferences for communication of health care wishes ranged from desire for a written advance directive, verbal to family, to no preference. Elements of a trusting relationship with caregivers included good communication and adequate time for questions. All shared stories of their own and/or their communities’ perception of inadequate and sometimes racist care from members of the health care system. The sampling plan, interview guide, and demographic questionnaire elicited adequate data.

**Conclusions:** A larger qualitative study is feasible with this population group. African Americans in this pilot study all experienced awareness of mistrust for the health care system within their families and communities, although none linked this to lack of desire for formal end of life planning.

**Implications for Nursing:** Good communication and adequate time for questions and concerns may increase formal end of life planning in this population. Nurses need to remain aware of the potential for mistrust of the health care system within the African American older adult population.
Patients’ Perception Towards Nurses with Visible Body Modifications

Dylan Stokes, Katrina Filipek
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Significance: Visible body modifications are becoming the social norm. Although tattoos and body piercings can be a form of art and self-expression in culture and society, there are still many implications when it comes to professionalism in the workplace—especially for healthcare providers—specifically nurses. This leads to the conflicting insight on hiring, competence, and ultimately the patients’ perceptions toward nursing care and its delivery.

Purpose (or Problem): To identify research and other evidence-based implications that could determine if visible body modifications had any effect on patients’ perceptions towards nurses.

PICO Format Question: Among hospitalized patients, what is the effect of visible body modifications on patients’ perception compared with nurses who do not have visible body modifications?

Search Strategy and Quality Screening: The literature search process used CINAHL. Search terms used included nursing, tattoos, perceptions using no Boolean operators. The search years were limited to 2008-2013 and the articles were limited to research studies. We included studies that were not in full text and retrieved one study through an interlibrary loan. Quality screening included checks for clear patients’/potential patients’ perceptions on tattoos and piercings on male and female models and implications for nursing job security.

Evidence: The search produced an initial total of 25 studies but that number declined to 10 after eliminating statistical data research studies and journal articles. Further elimination of the results was narrowed down to 2 studies that experimented on patients and potential patients most relevant to the PICO question.

Synthesis of Evidence: The examined articles indicated that patients’/potential patients’ perceptions can be distorted towards female and male nurses with visible tattoos and piercings. With approximately the same sample size in each study, females, in particular, were perceived in a more negative manner and as less professional than their male counterparts.

Conclusions and Recommendations: The results from the research articles presented that body modifications can interfere with the perception of hospitalized patients and potential patients. The research articles gave evidence to the effect of body modifications on perceptions towards nurses with visible tattoos and piercings. Additional research is recommended using a prospective design in which patient care providers are viewed in person by patients in other hospital settings to disprove cultural norms.

Implications for Nursing Practice: Nurses with visible body modifications should be attentive during the hiring process when securing employment. Nursing administrators should evaluate policies and practices regarding healthcare providers with displayed modifications while providing patient care. Currently, there are no national guidelines regarding visible body modifications for nurses while delivering care, only individual facility policies.
# Pacemaker Indications: A Case Study

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## Clinical Significance:  
Syncope and angina are two frequent problems seen in the acute care setting. The differential diagnosis, work-up and treatment can vary depending on physician and availability of resources. Based on clinical finding the need for pacemaker or implantable cardioverter-defibrillator (ICD) may be indicated. Class I indications for permanent pacemakers include: symptomatic sinus bradycardia or atrioventricular (AV) block, sinus bradycardia as a result of necessary drug therapy, symptomatic chronotropic incompetence, advanced AV block, Type II 2nd degree block with wide QRS, sustained pause-dependent VT, recurrent syncope with carotid sinus massage causing asystole > 3 sec.

## Statement of the Problem (or Purpose):  
In this study the indications of permanent pacemaker placement was evaluated and determined appropriate.

## PICO Format Question:  
In adult patients experiencing syncope and stable angina, which tools and exams are used to determine if permanent pacemaker implantation is indicated over conservative medical management (i.e. treatment of underlying cause, optimal medication regimen, educating on lifestyle changes, and/or starting Theophyline).

## Literature Search Strategy:  
The literature search process used Pubmed, UpToDate, and GoogleScholar. Search terms used to locate the appropriate literature were syncope, stable angina, pacemaker, and sick sinus syndrome.

## Literature Search Results and Evidence:  
The search provided over 2,000 articles. Studies that were positive for acute coronary syndrome and/or ST elevation myocardial infarction were eliminated. There were several studies regarding indications for pacemaker placement, as well as, new guidelines and recommendations from multiple academic societies. In conclusion, a complete cardiac evaluation should be performed, as well as, other test that may be necessary depending on patient presentation and history. Evidence for pacemaker therapy depends on bradycardia and symptom correlation.

## Evidence from Clinical Case:  
A 66 year old male patient with a chief complaint of intermittent chest pain, syncope and falls for the past month. Positive cardiac history: coronary artery disease(CAD), hypertension (HTN), hyperlipidemia (HPLD), and obesity; Carvedilol 3.125mg twice daily; heart rate in the 40-50's on cardiac monitoring. Carvedilol was stopped and IV Nitroglycerin and fluids were started. Three sets of cardiac enzymes were negative. EKG showed sinus bradycardia with no ST changes. Angiogram was negative, no intervention required. Echocardiogram showed 35% ejection fraction and cardiomyopathy. Positive tilt test. A dual chamber pacemaker was implanted and he was restarted on beta-blocker, aspirin, and fibrate. Patient was discharged home with a clean incision. At his two week follow-up, patient was asymptomatic with no signs of angina or syncope.

## Comparison and Synthesis of Evidence:  
The articles and guidelines in the literature search together with clinical experience demonstrated the appropriate course of treating symptomatic bradycardia and indications for pacemaker placement. The patient had a positive outcome from the invasive treatment and was discharged home within 3 days. A complete cardiac evaluation was performed by a cardiologist and all of the appropriate tests were performed before the decision was made to implant a pacemaker. The guidelines and evidence found during this search matched the course of treatment for this case, the recommendations should remain.

## Conclusions and Implications for Nursing Practice:  
The combined evidence from the literature and clinical experience with this patient demonstrated that the Class I recommendations for permanent pacemakers in the treatment of symptomatic bradycardia generate positive outcomes. At this point, all other reasons for angina and syncope were ruled out and treated appropriately. Nursing as a profession should continue to encourage lifestyle changes and primary prevention for our patients. Education is key to these patients in understanding their health and the effects of poor habits. Evidence base practices will continue to evolve with the changes in medicine. The nursing profession will have to keep abreast of the best practices and ensure these changes are implemented.
"Feeding a “Sleeping Gut” after Cesarean Section: an Evidence-Based Practice Literature Review"

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**Significance:** Clinical opinions of bedside nurses differ about when it is safe to feed a patient. To some degree, nursing judgment is responsible for when diet is advanced from clear to regular in post-operative C/S. Without nursing consensus that is evidence based, advancement of diet may differ from one patient to the next based on who their nurse is. If a patient is in no danger of developing an ileus if they eat before passage of flatus, then nurses who deny food until flatus passes may cause physical and emotional discomfort to the patient.

**Purpose (or Problem):** The purpose of this EBP literature review was to determine if clinical evidence existed to support the practice of withholding a regular diet until passage of flatus after a cesarean section.

**PICO Format Question:** Will a post-cesarean section patient eating solid foods before passing flatus show no increase in paralytic ileus over post-cesarean patients receiving usual care?

**Search Strategy and Quality Screening:** A literature search of CINHAL, PubMed and Google Scholar for randomized controlled trials was conducted. Search terms included post-operative cesarean section, feeding, flatus, and ileus. The search initially limited results to randomized controlled trials published in English before 2007, but little resulted. The search was expanded to articles published since 2000. Quality screening included inclusion of RCT and measurement of RCT outcomes against the 2007 Cochrane Collaboration meta-analysis on this subject.

**Evidence:** The searches returned 14 randomized controlled trials on this topic. Of these, five were available through Pubmed, CINHAL or Google Scholar.

**Synthesis of Evidence:** Each article reported no increase in the incidence of ileus when feeding before flatus after a cesarean section. Chantrasorn (2006) reported an 8% decrease in ileus symptoms in patients fed before flatus. MacMillen reported decrease in nausea, vomiting and abdominal distention from 5-10

**Conclusions and Recommendations:** Withholding solid food until passage of flatus does not appear to prevent development of ileus. Requiring flatus may delay ambulation, increase pain scores, slow the return of peristalsis and have negative psychological effects. Based on this evidence, patients with active bowel sounds and no nausea or vomiting should be offered a low residue regular diet after cesarean section.

**Implications for Nursing Practice:** Feeding before flatus does not increase the incidence of ileus. Feeding patients sooner after C/S may decrease hospital length of stay and associated costs. Feeding sooner can improve patient satisfaction and may reduce the amount of pain medication required. It also encourages earlier ambulation which has proven benefits.
Significance: Patients at UAMS on the oncology unit receive high-dose chemotherapy and stem cell transplants. These patients usually become severely neutropenic (ANC < 500) and can suffer from infections as a result (Munshi & Montgomery, 2000). Many patients receive a prophylactic antibiotic regimen to help protect against such infections. However, some physicians do not use prophylactic antibiotics because of the potential increased risk of antibiotic-resistant infections and unpleasant side effects.

Purpose (or Problem): The purpose of this literature search was to gather evidence about the effectiveness of antibiotic prophylaxis for neutropenic cancer patients.

PICO Format Question: In high-risk neutropenic cancer patients does a prophylactic antibiotic regimen compared with no prophylactic antibiotic regimen lead to decreased rate of infection?

Search Strategy and Quality Screening: A search was conducted using Public Library of Science (PLOS), American College of Physicians (ACP), Google Scholar, and Web of Science databases. The search terms were neutropenia, neutropenic cancer patients, afebrile neutropenia, prophylactic antibiotics, and decrease infection with the Boolean operator AND to combine the terms. Years searched were between 2003 and 2013. The articles were limited to RCTs, systematic reviews, meta-analyses, and cohort studies. Inclusions were cancer diagnosis, inpatient or outpatient setting, patients receiving chemotherapy, high-risk neutropenia, and afebrile.

Evidence: Several articles were retrieved from the databases: 24 in PLOS, one in ACP, 987 in Google Scholar, and 663 in Web of Science. After applying the date restriction, and limiting articles to full text and adult patients, one randomized control trial, one cohort study, two meta-analyses, and two published professional practice guidelines were retained for use.

Synthesis of Evidence: The four articles show that administration of prophylactic antibiotics to afebrile neutropenic patients decreases the rate of fever and infection. The cohort study and meta-analyses showed decrease in mortality with prophylaxis. There was no significant increase in risk of antibiotic-resistant bacteria development with use of prophylaxis. The professional practice guidelines recommend prophylaxis with quinolones in high-risk neutropenic patients.

Conclusions and Recommendations: Overall, the information from the reviewed studies, and Oncology Nursing Society (ONS) and Infectious Disease Society of America provides moderate to strong evidence and recommendations for use of prophylactic antibiotics to decrease infection rates in high-risk neutropenic patients. Therefore, we recommend the use of prophylactic quinolones (ciprofloxacin 500-750 mg bid or levofloxacin 500 mg daily) for patients with ANC < 500 until resolution of neutropenia.

Implications for Nursing Practice: The evidence supports decrease in infection and neutropenic febrile episodes with prophylaxis. Some physicians, patients, and nurses may be resistant to the change in recommendations for administration to only high-risk neutropenic patients and for discontinuation of prophylaxis after neutropenia resolution. Collaboration and education are important for a successful change.
# Hearing Aid Use and the Elderly

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**Significance:** Hearing loss in the elderly population is very common but can be helped, not cured, with devices and technology, which in turn, improves the quality of life of the elderly population using the devices. Hearing loss can diminish the quality of life but with the research obtained the quality of life can be increased significantly with the use of a hearing aid or cochlear device.

**Purpose (or Problem):** Elderly individuals sometimes have hearing problems, which lead to a decrease in daily activities, decreased communication and socialization, depression, miscommunication, safety risk, and low self-esteem. Hearing deficits can diminish a person’s quality of life.

**PICO Format Question:** With the elderly population does using devices such as hearing aids or cochlear implants increase the quality of life for the elderly as well as increase the socialization of the patient and increase the amount of daily activities the patient does?

**Search Strategy and Quality Screening:** When searching for my literature articles I used EBSCO, MedLine, and CINAHL. Search terms used to locate appropriate literature were hearing loss in elderly, hearing aids in elderly, and hearing impaired elderly. All the sources used for the review of the literature were obtained from the EBSCO Host database via the Southern Arkansas University Magale Library website. All the articles obtained were less than five years old, have been peer-reviewed, and are full-text articles. When searching for articles keywords were used such as hearing devices and elderly population or hearing aids and elderly population.

**Evidence:** With the search I only pulled up about 56 articles about hearing loss in the elderly and hearing aid use in the elderly. The studies are limited due to the fact that the research was only on elderly patients.

**Synthesis of Evidence:** First time hearing aid users, discuss how hearing devices improve the participant’s quality of life, how individuals benefit from hearing aids, and the satisfaction that is achieved from the participants who use hearing devices. In one of the articles the purpose of the study was to identify if the post-fitting questionnaire was “affected by informed verses blind administration.”

**Conclusions and Recommendations:** The use of hearing aids in the elderly greatly improves their quality of life.

**Implications for Nursing Practice:** The studies are very important in nursing because we can educate our patient about how hearing devices work and how patient’s quality of life can be improved. The studies with questionnaires let our nurses know that the HHIE is a reliable tool to use before getting the patient hearing aids and after the patient has had the hearing aids for a few months.
Review of Literature on Articles Related to the Impact of Using Assistive Devices for the Older Adult with Vision Impairment

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**Background:** This literature review will focus specifically on assistive devices and their impact on older adults with vision impairment. There is a wide range of assistive devices available to those with some form of vision impairment. The impacts of using these devices can be categorized as either positive or negative when assessed from the individual’s point of view.

**Purpose:** There is an overwhelming need for older adults to find ways to adequately cope with vision impairment where possible. The degradation or complete loss of vision is prevalent in older adults and poses significant obstacles. Challenges include everything from menial daily tasks and activities to maintaining one’s occupation or continuing lifelong hobbies and recreational activities. There are a number of ways for an individual to deal with vision impairment. The various approaches can include, but are not limited to, cognitive coping methods, counseling, dependence on others and assistive devices.

**Method:** The journal articles were obtained through the EBSCOhost online database.

**Results:** These positives are mostly realized by way of vision improvement or the ability to conduct or perform daily tasks, occupations, recreational activities and other lifestyle activities through some form of compensation. The extent to which individuals sought vision rehabilitation varied proportionally to the degree of their vision impairment. Those who were more impaired were more inclined to seek rehabilitation services. This was due to the fact that their vision impairment had a greater detrimental effect on their lives, thus they were more willing to seek help. Those who had a more minor impairment were further reluctant to seek the use of assistive devices or other rehabilitative services because of a number of factors to include inconvenience, out of pocket costs, social stigmas, etc. People were simply unaware or uneducated regarding the rehabilitative services available to them in regards to low vision problems. Barriers or fears to seeking low vision rehabilitation because of the society at large. It is harder for the impaired clients to seek employment and on mental health.

**Conclusions:** There are many devices available to help individuals. Many of these have been proven very useful. The positives found through this literature review include, but are not limited to, maintaining one’s occupation, continuing in social or recreational activities, and being able to pursue one’s goals in life. The impairment of sight can be a traumatic event for someone. Assistive devices that are able to compensate for this are able to give individuals back some of their very own well-being.

**Implications for nursing:** The nurse needs to become aware of assistive devices and the positive aspects of them for their clinical practice. Realizing that there are also negative effects helps decrease the knowledge gap that most nurses do not recognize on daily basis.
### Relationship of childhood sexual abuse to substance abuse in adolescence or adulthood

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**Background:** Substance abuse (SA) is a major public health problem. Criminal behavior, higher rates of school drop-out, unemployment, homelessness, and risky sexual behavior resulting in high rates of sexually transmitted infections are consequences associated to SA. Much attention has been paid to the role of early traumatic experiences—especially childhood sexual abuse (CSA)—has played in the etiology of SA problems.

**Purpose:** The aim of this manuscript was to review current findings from the scientific literature on the relationship between CSA and later drug and alcohol problems.

**Method:** A limited systematic review of the scientific literature on CSA and its relationship to SA in later adolescence and adulthood. Six internet-based databases (PubMed, Ovid, Web of Science, EBSCO, PschINFO, and CINAHL Plus) were searched simultaneously using an integrated healthcare library-based search engine. Separate searches were conducted using keywords child(hood) sexual abuse, child(hood) and sexual maltreatment each paired with keywords substance abuse, substance use, drug use, drug abuse. Due to the large number of articles published in the past 10 years that address the relationship between CSA and substance in later adolescence and adulthood, only recent articles published between January 2005 and the March 1, 2014 were included in this review.

**Results:** The search identified 156 articles. Twenty-three articles whose abstracts appeared to have addressed both CSA and SA were identified. Of those, thirteen were identified in which CSA was clearly an antecedent to SA. Of those, one study was the first known study using a twin design controlling for familial influences to determine the relationship of CSA to SA. Of the thirteen reviews, nine studies examined the relationship of CSA to SA in adults and two articles examined this relationship in adolescents. Four studies investigated the role of CSA to injection drug use specifically. Four articles addressed the relationship of CSA to SA in specific populations: gay and bisexual men, incarcerated individuals, and American Indians.

**Conclusions:** CSA is strong determinant of future SA risk. The results of this literature review provide important implications for public health and preventive services. Children, both males and female, who experience CSA are at greater risk for SA than children who do not. Certain groups (gay and bisexual men, America-Indians, and individuals with criminal histories) characteristically are at greater risk for CSA and SA. This review underscores the need for improved SA research, early screening, prevention, and treatment for victims of CSA.

**Implications for Nursing:** Because individuals who experience CSA are on a high risk trajectory to SA, nurses should recognize the need for screening and the importance of advocacy for treatment for children who experience CSA. Nurses should be able conduct comprehensive evaluations of CSA and learn how to report cases of CSA to child protective services. Nurses can integrate SA prevention efforts into psychological and family support services for children who experience CSA. Nurses also have a role in policy development research and dissemination for both practice and further research. Finally, nurses can develop evidence-based protocols and interventions for CSA and SA that are tailored to culture and unique experiences of particular groups within our society.
How older people spend time, make connections, and build communities.

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Southern Arkansas University

Significance: How older people spend time, make connections, and build communities is strongly related to the health and satisfaction of the elder. Keeping elderly people engaged in physical and cognitive activities is beneficial to maximizing the individual's life satisfaction and health. Research also shows that keeping elderly people engaged in their normal roles within a community can maximize life satisfaction and overall health. Studies show that physical activity can reduce the amount of time an individual experiences illness and it can reduce the effects of the illness. Research shows that Alzheimer's patients that engage in physical activities can maintain more cognition and physical abilities throughout their illness.

Purpose (or Problem): The individual’s economic status is possibly a contributing factor to the lack of exercise, activity level, and lack of relationships that can lead to a decrease in satisfaction and overall health.

PICO Format Question: Does facilitating older adults to spend time making healthy connections and building healthy communities make for a healthier lifestyle for the individual?

Search Strategy and Quality Screening: The reviewed literature was obtained from studies within public databases. The databases used to collect the information were, EBSCOhost, MEDLINE, Psychology and Behavioral Science Collection, PsycINFO, Academic Search Complete, Sportdiscuss, and CINAHL. The research years were limited to 2008-2013 and article types were limited to peer reviewed articles. Individuals who were 50 and older were included in the studies. The search excluded any study that used participants younger than 50 years old and studies that were not peer reviewed within the last five years. The search included random controlled trials, qualitative studies, and quantitative studies.

Evidence: The search produced 147 studies and 139 studies were not used. Limiting the results were factors that include the age of the participants, the year of the study, and the type of study.

Synthesis of Evidence: The research studies that were reviewed indicate that elderly individuals who remain active with exercise show significant signs of having a healthier lifestyle. Studies show that physical activity not only improves the health of normal aging elders but can possibly improve the health of elders with illnesses. Evidence shows that possible benefits from the exercise regimen improve cognition, physical abilities, and it increase then ability of the individual to perform more of their independent activities of daily living with less assistance. Studies show that making connections with people is an important component to building relationships and accepting roles, which are important factors in reaching maximum life satisfaction. According to Carman, 2011 maintaining relationships and role participation can benefit the health and mental status of elders through the emerging physical activity and sense of purpose. According to Carman 2011, elders are beginning to focus large amounts of time building healthy communities for themselves and surrounding communities.

Conclusions and Recommendations: In reviewing several of the current studies that look at how older people spend time, make connections, and build communities, strong evidence shows that each of these are related to the health and satisfaction of the elder.

Implications for Nursing Practice: Healthcare members caring for elderly individuals should take into consideration the positive effects of physical activity, making healthy relationships, and building healthy communities when planning the care of the individual. When planning the care of the individual, case managers can assist elderly people within the community in finding these resources to help elderly people maximize their life satisfaction.
### Considerations on Erectile Dysfunction and the Aging Male in Nursing Practice

**Jessica Zigler**  
Southern Arkansas University

**Significance:** The research done has showed that other comorbid conditions actually may have a relationship with ED, specifically when taking the severity of the erectile dysfunction into consideration. Severity of ED was associated with diabetes mellitus, respiratory problems, connective tissue problems, neurological diseases, cancers, and many more. With these findings, the idea is made possible that the severity of a man’s ED may be a predictor of the person’s overall health (Solonia, 2012).

**Purpose (or Problem):** With the rising number of diagnosed and undiagnosed cases of erectile dysfunction, more research is being done on the topic, specifically focusing on other problems that may be associated with ED. ED can have a significant impact on a man’s psychological health. Since ED is such an age-related condition and can have negative effects on the sex life, this population may have special needs. Support and planning need to be implemented, so these men can maintain their sexual functions as they age.

**PICO Format Question:** Among the aging male population, can erectile dysfunction be used as a predictor of health or other comorbidities?

**Search Strategy and Quality Screening:** The literature search used the EBSCO host. Search terms included erectile dysfunction, aging male, and comorbid. Search results were limited to the last five years, to stay current. Diabetes Mellitus and cardiovascular problems were also researched, due to being very popular comorbid issues being researched, along with erectile dysfunction. Quality screening included use of tools to measure ED, selection process for patients, confidentiality measures taken, reviews, and peer-reviewed materials.

**Evidence:** Six studies were reviewed, to include associations between erectile dysfunction and cardiovascular issues, advanced age, psychiatric symptoms, mental health, intercourse regularity, and general health status.

**Synthesis of Evidence:** Evidence suggests that many other comorbid conditions can be associated with erectile dysfunction, including cardiovascular issues and Diabetes Mellitus. Men that engage in intercourse more frequently are less likely to have problems with erectile dysfunction and have less mental health symptoms. Patients with erectile dysfunction do not always seek out help for the problem, so promotion of treatment for this problem should be encouraged.

**Conclusions and Recommendations:** Research concerning this widely spread problem in the male population will benefit patient care significantly. Finding causal relationships, or even risk factors, associated with ED will identify warning signs that may allow for early intervention of a potential problem. Enough research has been done to show that when a man has ED, a cardiovascular assessment would be helpful. As the research on this topic continues to grow, other comorbid disorders may be able to predict the same. Staying up to date with the research on this topic would benefit caregivers and patients around the world.

**Implications for Nursing Practice:** Further assessments on patients with erectile dysfunction for other comorbid conditions could raise costs. However, in the long run, these costs could be lower than the amount of treating one of these conditions, if it was to progress further, without early identification and interventions. Nurses must be aware of the psychosocial factors that go along with erectile dysfunction, and uses therapeutic communication when discussing sensitive topics with patients.
## Care of the Caregiver: A Review of the Tools Used to Assess Caregiver Role Strain

**Johanna Hensley**  
Southern Arkansas University Nursing Student

**Significance:** Studies suggest relationships between the caregiver's burden and the patient's mental status and physical abilities, as well as the emotional, health, and career state of the caregiver, indicating the need for a concise, reliable assessment tool for caregiver burden.

**Purpose (or Problem):** Provide information on the current state of the knowledge of both the Preparedness for Caregiving Scale and the Caregiver Strain Index, as well as known changes within the history of the Caregiver Strain Index.

**PICO Format Question:** Does the use of a standardized assessment tool measuring caregiver role strain in caregivers, as opposed to no assessment tool, give an accurate indication of the specific stressors they experience?

**Search Strategy and Quality Screening:** Literature on the Caregiver Strain Index and the Preparedness for Caregiving Scale was obtained by searching the Science Direct, EBSCOHost, Research Gate, Gale, Jester, and PubMed databases through Southern Arkansas University’s Magale Library webpage. Search criteria was peer reviewed, full text articles published after 2008.

**Evidence:** The results of the study implied that the CSI was a reliable tool for identifying burdened caregivers. Additionally, more confident caregivers report less caregiver burden.

**Synthesis of Evidence:** The CSI is a short, conveniently administered assessment that has given rise to many customized versions, all of which have been proven reliable and generalizable in a variety of situations. On the other hand, the Preparedness for Caregiving Scale is a relatively new tool, and although it has proven to be reliable and internally valid, little is known about its adaptability to specific situations.

**Conclusions and Recommendations:** It appears that the importance of caregiver burden as a whole is neglected within the nursing field. There seems to be a lack of consideration for the importance of preventative screening and a deficiency in awareness for the dangers of caregiver strain. Because of this, both the Preparedness for Caregiving Scale and the Caregiver Strain Index are underused in nursing practice.

**Implications for Nursing Practice:** Ideally, a caregiver should be first screened with the CSI or MCSI to establish a baseline strain measurement. Answers of "yes" should be discussed and interventions to reduce stress should be established. Next, the caregiver must be evaluated using the PCS; high scores should be explored and measures should be taken to increase the caregiver's confidence. The caregiver should be provided with any resources she may need to provide competent care or alleviate burden. Finally, the caregiver must be reevaluated using both assessment tools, either at regular intervals or when her caregiving situation changes.
**Homelessness in the Elderly**

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**Background:** Homelessness for our elderly population is a very vulnerable, frightening experience. This has become a rising trend over the past few years with mentally ill elder clients being the most common who are homeless. Not only is the patient’s physical health an issue but their psychological health becomes an issue as well. Some places do not provide health care to these individuals due to lack of a permanent home address. With proper nursing interventions and client education on helpful resources, we could see a decline in this rising development.

**Purpose:** Elderly patients who become or are homeless deal with many stressors in their lives. Some of the problems these patient’s face include lack of health care, finances, food, support services, and emotional instability. Infections and disease states become a huge concern for an elder patient who is not receiving the proper health care needed by living in an unfit environment and not having the funds to afford seeing a health care provider. The elder homeless population is not aware of resources or do not have the accessibility to resources that can provide the help these patients desperately need. In some cases, simply not having a permanent home address takes away their ability to receive health care. Health care provider’s goals are to care for all patients in need and to educate clients about help they may not be knowledgeable about. Not only nurses but all members of the health care team need to recognize this growing trend and find ways to reduce or try to eliminate this problem and get these patients the help that they need.

**Method:** Research on the literature was retrieved through EBSCO and Science Direct Database. Homelessness, elder patients, health care, mentally ill, and psychological care were terms utilized for researching literature on this predicament. The search years were restricted: 2009-2013. Risk factors, ethnicity, lack of care, and interventions were incorporated. Quality screening included meta-analysis, risk factors associated with homeless geriatrics, people with mental illnesses, life management enhancement group interventions, and ways nurses and other health care team members can get involved.

**Results:** One research article had a total of twenty five study participants aged forty to sixty-two all who had been homeless at some point in their lifetime. These patients grew up in a low income family, were considered poverty level, and/or had lack of accessible health care. After reviewing literature on homeless geriatrics it was evident that major risk factors included poverty, lack of a job, lack of accessible health care needs, and growing up in a low income family. These individuals also suffered from some kind of mental illness such as major depression, bipolar disorder, or schizophrenia. It was also noted that some of the study participants were known to have abused alcohol or drugs at some point in their lives. The reviewed article indicated that sixty four percent of the study participants had lack of social support. Nurses and members of the health care team need to begin educating people as young as possible because bad choices made earlier in an adults life is linked to a harder lifestyle for the elder adult. The Life Management Enhancement group is utilized with hopes to instill confident social relationships and overcoming homelessness for these patients.

**Conclusions:** Proper recognition and interventions of health care and psychological problems with homeless geriatrics is the goal. All health care providers should educate on proper resources for these patients or make resources available.

**Implications for Nursing:** Nurse can begin teaching safe and good behaviors at a young age to prevent issues occurring for adults later in their lives. Reviewing literature on this specific topic can educate the nurse with this rising situation and help him/her plan care accordingly. Knowing the research can also provide the nurse with the appropriate knowledge of what resources need to be utilized and how they can make these resources available.
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<td>Kayla Pride</td>
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<td>Nursing Student, BSN, Southern Arkansas University</td>
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**Significance:** Substance abuse among the elderly is a growing problem with alcohol and prescription drugs being the most commonly abused substances. Risk factors for substance abuse in the aging population includes polypharmacy, being female, social isolation, poor health status, chronic medical comorbidity, and previous and/or co-occurring substance use or psychiatric disorder.

**Purpose (or Problem):** To determine whether or not education plays a role in polypharmacy, the reliability of self-reported use of certain drugs, the nonprescription use of prescription pain relievers, and the use of alcohol and drugs in relation to stressful situations in life, screening for alcohol abuse, and the harm reduction among heavy drinkers.

**PICO Format Question:** N/A

**Search Strategy and Quality Screening:** An EBSCO search was performed using the terms SUBSTANCE ABUSE, ALCOHOL ABUSE, and ELDERLY. The Boolean operator AND was also used. The results were limited to research studies done within the last 5 years.

**Evidence:** There were not many results returned. Seven articles were analyzed to see where they fit into the study.

**Synthesis of Evidence:** The examined articles indicated that participants with lower education levels tended to have a higher probability of polypharmacy, excessive polypharmacy, and potential inappropriate drug use. Another study showed that self-reported use of medications were usually accurate and that self-reporting was not an issue among the elderly population. According to another study, alcohol use was more prevalent in men, but prescription drug use was more prevalent in women. Another study concluded that AUDIT is an accurate tool to use to test for alcohol abuse in the elderly population.

**Conclusions and Recommendations:** Upon examining these studies, it is found that not enough information exists to accurately determine substance abuse in the elderly. More extensive studies are needed to further evaluate the prevalence of this growing problem.

**Implications for Nursing Practice:** There is no evidence based practice in nursing to support this problem. Therefore, nurses need to evaluate this problem and provide evidence based practice to help solve this growing problem and to allow elderly clients the help they need.
**Will a multimodal approach with orthopedic total joint arthroplasty patients decrease pain as compared to traditional PCA pain management?**

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**Significance:** When treating total joint arthroplasty patients postoperatively, relying solely on traditional intravenous PCA or epidural narcotic pain management may not be the most effective method to reducing orthopedic joint pain. A traditional PCA based pain management approach can lead to poorly controlled pain and thus poor outcomes and delayed recovery. In order to improve patient outcomes and reduce postoperative pain, it is necessary to treat patients with the most effective and therapeutic interventions.

**Purpose (or Problem):** To investigate the implementation of a multimodal approach with orthopedic total joint arthroplasty patients versus traditional intravenous only narcotic or PCA based methods as means to decrease pain.

**PICO Format Question:** Would multimodal pain management decrease pain in orthopedic total joint arthroplasty patients as compared to traditional PCA narcotic based pain management?

**Search Strategy and Quality Screening:** The literature search process was conducted using EBSCO, Pubmed, and Google Scholar databases. Multimodal, total joint arthroplasty, side effects, and outcomes were the search terms used. Years searched were limited to 2006-2014. Studies using multimodal therapies with patients undergoing procedures other than total joint arthroplasties were excluded. Quality screening involved ensuring studies were applicable to PICO question and investigated both multimodal and PCA based methods for pain control.

**Evidence:** The search yielded 399 results. 34 were selected for further review. 5 articles chosen.

**Synthesis of Evidence:** 5 out of 5 articles revealed that a multimodal approach manages postoperative pain more effectively in total joint patients than PCA based pain management.

**Conclusions and Recommendations:** Adopting a multimodal approach to pain and treatment was more effective in controlling pain. Therefore, a multimodal protocol is the recommended approach to managing pain in total joint arthroplasty patients.

**Implications for Nursing Practice:** Effective pain treatment and intervention is a major role for nurses. As a part of the inter-disciplinary team, nurses can advocate for the use of a multimodal approach with orthopedic total joint arthroplasty patients in order to better control pain.
**In Patients Receiving Insulin, Does Subcutaneous Injection in the Abdomen Compared to the Anterior Thigh & Upper Arm Lead to Faster Absorption Rates?**

Kelly Cox, Emily Halter, Becca Rogers  
HSU Nursing

**Significance:** Knowledge of absorption rates helps the nurse and patient work to better regulate glucose metabolism. Knowledge of current evidence based practice will lead to better patient outcomes.

**Purpose (or Problem):** The purpose of the study was to evaluate the current literature regarding absorption rates in different anatomical injection sites. Irregular glucose metabolism is a result of improper injection site rotation.

**PICO Format Question:** In Patients Receiving Insulin, Does Subcutaneous Injection in the Abdomen Compared to the Anterior Thigh & Upper Arm Lead to Faster Absorption Rates?

**Search Strategy and Quality Screening:** We searched Medline using the terms “insulin absorption injection site” and found 108 references. There were no repeated references and most results were excluded due to not linking a full PDF text. This narrowed our results to 44 full text articles. We narrowed it down to three articles because most articles did not pertain to our PICO question. Due to a lack of recent studies on the subject, our studies dated back as far as 1980.

**Evidence:** In all three of the studies examined insulin was absorbed fastest when injected into the abdomen. In 2013 the American Diabetes Association suggested that patients should rotate injection sites within the same anatomical region rather than different anatomical sites. Research suggests that in the morning and around meals the patient should inject in the abdomen, and before bed injecting in the arm or thigh due to slower absorption rates.

**Synthesis of Evidence:** Research suggests that injections should be rotated within the same anatomical site rather than alternating between different anatomical regions. Insulin is also absorbed more rapidly when injected in the abdomen rather than the arm or thigh.

**Conclusions and Recommendations:** The research shows injection of insulin into the abdomen increases the absorption rate.

**Implications for Nursing Practice:** Nurses can use this knowledge to better regulate glucose metabolism by injecting in the most appropriate site according to meals and time of day.
### Cost-Benefit of Employing a Clinical Nurse Leader on a Medical Surgical Unit in Arkansas

<table>
<thead>
<tr>
<th>Kerry Jordan MSN, RN, CNL</th>
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<tr>
<td>Laura Hall MSN, RN, CNL</td>
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**Background:** Growing numbers of Clinical Nurse Leaders (CNLs) across the United States are impacting safety and quality of healthcare systems. However, because of the small number of CNLs in Arkansas, their value is not well known.

**Purpose:** The purpose of this limited cost benefit analysis was to determine the financial value of employing a CNL on a medical surgical unit in an Arkansas hospital.

**Method:** Researchers collected and analyzed data from an 18 bed medical surgical unit in a non-profit hospital in Arkansas. Costs and benefits were calculated based on the data.

**Costs:** After reviewing current role description of unit personnel researchers recommended that the Admission/Discharge RN position be converted to a CNL position. Calculated costs for converting the role included: 1) Tuition and book fees for two years of CNL education at a local university totaling $13,054 over a two year period. 2) A salary increase of $10,400/annum for the position over a five-year period. Salary costs included a 1.7% annual cost of living increase and an annual discounted rate of 3%.

**Benefits:** Unit data revealed higher than average rates for falls and CAUTIs for 2012. Benefits were calculated based on potential reduction of those rates, along with potential savings from decreased RN turnover rates. The unit experienced 20 falls in 2012 (rate 3.91/1000 patient days). Research indicates that CNL initiatives can result in a 50% decline in fall rates. Researchers estimated a decrease in unit fall rates by 10 falls/ann. On average, 30% of falls result in injury and falls with injury cost $13,316/fall. Consequently, CNLs could save the unit 3 (number of estimated falls with injury prevented) x $13,316/ann or $39,948/ann. The unit experienced 5 CAUTIs (rate .978/1000 patient days) in 2012. 2007 CAUTI costs are estimated to be on average $935 per incident. Based on outcome data from several hospitals, it is estimated that employing a CNL on the unit could decrease CAUTI incidence to 0, which represents a savings of $4673/ann. RN turnover rates on the unit for 2012 averaged 1.33/ann. The financial cost of losing a single nurse is estimated to equal twice the nurse’s annual salary. Average RN nursing salary at the study hospital is approximately $46,800. Thus estimated cost of losing one RN is $93,600. Studies have documented decreased staff turnover rates of 10% after CNL implementation. Based on these outcomes, a decrease in nursing staff turnover rate by 10% would mean a $12,448/annual savings to the unit. Cost benefits of decreased falls, CAUTIS, and RN turnover rate, were summed for years 3-5 using a discount rate of 3%.

**Results:** Total cost of CNL education and employment on the unit over a five year period equaled $42,200. Total benefits of CNL employment equaled $152,092. The resultant cost/benefit ratio was 3.6.

**Conclusions:** This limited cost/benefit analysis demonstrates that a CNL program at a hospital in Arkansas is well worth the investment.

**Implications for Nursing:** CNLs are contributing to improved quality of care across the country. Arkansas would benefit from the expansion of this important nursing role.
## Depression and End Stage Renal Disease, A Case Study

Kerry Murphree RN, BSN, CEN, AG-ACNP-Student  
The University of Arkansas for Medical Sciences, College of Nursing

<table>
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<tr>
<th><strong>Clinical Significance:</strong> Depression in the elderly often requires intervention(s), treatment and or inpatient treatment. Tools exist to aide healthcare providers in identifying those patients at risk for depression and yet worse, suicide. At times it can be a challenging process for healthcare providers as well as the patient and their families.</th>
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<tr>
<td><strong>Statement of the Problem (or Purpose):</strong> In this study, the diagnosis, interventions and treatment processes were evaluated based on literature review and practice guidelines.</td>
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<td><strong>PICO Format Question:</strong> In elderly, depressed patients with a chronic debilitating illness does psychosocial intervention(s) alone, compared to a combination of psychosocial intervention(s) with pharmacologic agents lead to the best treatment for depression?</td>
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<tr>
<td><strong>Literature Search Strategy:</strong> The literature search process used Ovid and EBSCO. Search terms used to locate the appropriate literature were elderly, depression, and end stage renal disease.</td>
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<td><strong>Literature Search Results &amp; Evidence:</strong> The literature search provided a total of 505 articles based on a depression and end stage renal disease search. When the term elderly was added, this reduced the search total to three. Of these, one was specific to caregiver depression, thus deleting it from the literature review. Depression is a common finding among end stage renal disease patients undergoing hemodialysis. Many find themselves confined to an uncomfortable chair for hours at a time with nothing to do and in one case, allowing hemodialysis to dictate her life.</td>
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<td><strong>Evidence from Clinical Case:</strong> In this case study, an 84 year old female was examined who received hemodialysis three times weekly, lived alone and was dependent upon public transportation to the dialysis center. She expressed sadness, loneliness, and her coping skills were minimal. While numerous healthcare providers had offered empathy, they also encouraged activity without acceptance. Diagnostics ruled out several differentials. The client agreed to participate in a community based program that included a number of activities, transportation, and a home based meal program. While she did show some interest and effort, she was also treated with pharmacological agents.</td>
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<td><strong>Comparison and Synthesis of Evidence:</strong> The literature and evidenced based practices as well as pharmacologic guidelines demonstrate that both psychosocial as well as pharmacologic interventions can have a positive impact and outcome.</td>
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<tr>
<td><strong>Conclusions and Implications for Nursing Practice:</strong> This combined evidence from the literature and clinical management and outcomes with this elderly patient demonstrated that both the psychosocial and pharmacological interventions provided a positive outcome. The outcomes included assistance from the family, and increased use of the meal program, more motivation and interaction with others. Despite the social involvement, this patient remained on pharmacologics. This case is an example requiring a holistic approach utilizing additional community resources, collaboration with healthcare providers, and assistance from the family. Depression is not a “normal” part of aging. The advanced practice registered nurse must be aware of depression and how it can correlate in those patients with chronic, debilitating illnesses. Utilizing tools such as the Geriatric Depression Scale can help identify patients at risk. Assessing the home environment and or including the family can be diagnostic. Recognizing the highest suicide rate is among the elderly can be alarming and one that healthcare providers must not ignore.</td>
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Use of Epidural Steroid Injections for a Herniated Lumbar Disk: A Case Study

Kristine Rowland, MSNc, RN, AG-ACNP Student
University of Arkansas Medical Sciences, College of Nursing

**Clinical Significance:** Herniated lumbar disks, a common problem due to aging or injury, can cause a myriad of complaints like pain, numbness, weakness, and tingling. It can be debilitating, leading to nerve damage and other long-term complications, as well as, decreasing one’s overall quality of life. It is important for patients to pursue treatment in order to regain nerve function and prevent motor and sensory loss. The two treatment routes in use today are either conservative therapies or surgery.

**Statement of the Problem (or Purpose):** The purpose of this work was to evaluate evidence for the use of epidural steroid injections for a herniated lumbar disc.

**PICO Format Question:** How do adult patients with a herniated lumbar disc who receive epidural steroid injections compare to patients who did not receive injections?

**Literature Search Strategy:** The literature search process used Google Scholar, PUBMED, and CINAHL. Search terms used were herniated disc, outcomes surgery, epidural injections, and lumbar spine.

**Literature Search Results & Evidence:** The literature search produced a total of 872 studies from 2010 to the present. Articles were eliminated if they did not focus on the lumbar spine, herniated discs, and epidural injections leaving a total of 26 articles. Articles were then further reviewed for relevancy leaving 4 articles. The effectiveness of epidural injections has been examined for many years, but there is a lack of recent studies available. Researchers today are still divided on their effectiveness. For example, one study found that there was no difference in outcome between patients that received injections and those that did not; while the systematic reviews presented studies finding that pain relief and patient’s functioning skills improved with the use of epidural injections at least in the short-term. Still another retrospective study found that patients had improvements in their symptoms after injections, however they made it clear that there were weaknesses in their study model. In light of these varied conclusions, there is a definite need for new studies regarding patient outcomes with and without the use of epidural injections.

**Evidence from Clinical Case:** The patient seen was a 67 year-old female with complaints of chronic back pain and leg pain. The patient was evaluated in clinic with a full physical exam, history, and evaluation of imaging studies. She was found to have a herniated disc at L4-L5. The patient had a history of physical therapy as a conservative treatment for her symptoms but found no relief. After discussing treatment options with the patient it was decided to continue her on a conservative route. She was referred to a pain specialist for further interventions. The patient received epidural steroid injections, which failed. She reported that the symptoms did not improve with the steroid injections. She decided to proceed with surgery. After the surgery the patient had improvement with her symptoms and was discharged the next day.

**Comparison and Synthesis of Evidence:** In reviewing the evidence from the literature review and the clinical case there is a difference of opinion in regards to the effectiveness of epidural steroid injections. Epidural steroid injections may provide short-term relief for pain and improve functioning but there are patients that may not have any changes in their symptoms as in the example of the patient in the clinical case. The available literature is conflicting. The use of epidural injections may or may not help a patient at least on the short term according to current literature. Results have varied, leading the reader to desire further studies.

**Conclusions and Implications for Nursing Practice:** The evidence from the literature and clinical experience showed that epidural injections can provide some relief for patients in the short term but effectiveness varies greatly. There is a need for further research. Nurses should be aware of the potential for effectiveness but remain mindful that some patients will not have the best outcome. It is important to continue to assess each patient individually and remain flexible with treatment plan.
**Loneliness In the Elderly**

LaDonna Marie Young  
Magnolia Regional Medical Center Clerk  

**Background:** Loneliness is a factor that many people may face at some point in their life. In the elderly there are many research supported factors predicting their loneliness in which health care professionals should be aware of. There are also variables and risk factors that coincide with loneliness along with treatment methods for this targeted population. When a patient has a poor self-report of health it may not always be a physical related issue, it may be psychological. 25% of the elderly population has a notable level of psychiatric symptoms. In individuals over age sixty, ten to twenty-five percent of the elderly in this research were shown to have depressive symptoms.

**Purpose:** To determine factors in loneliness in the elderly so that healthcare workers may become aware of the risk factors. To demonstrate the effect of loneliness has on the mental health of the elderly that is often overlooked in healthcare. This search for literature about loneliness in the elderly was conducted to provide further knowledge regarding the predicting factors a health care provider may observe in the elderly client. This review of the literature may help aid in clinical decision making along with providing evidence based practice for health care professionals.

**Method:** This literature review was conducted using the key words “loneliness” and “elderly” with the aid of the Boolean operator “AND” within the search of the Science Direct Database. Five quantitative peer reviewed articles under seven years old were selected using the advanced search option within the databases.

**Results:** There are common factors predicting loneliness that are found most abundantly. Common findings for loneliness include: being female, widowed, increasing age, health status, functional impairment, low education level, low income, living alone and having an absence of a social network seem to be the predominate risk factors.

**Conclusions:** Not having a social network for the elderly is clearly one of the main causes of loneliness. Once the health care provider has assessed a patient and realized that they are, or could possibly be lonely, there are some ways help can be obtained. The medical professional should be aware of ways to address the elderly’s issues whether physical or emotional to ultimately provide holistic care.

**Implications for nursing:** The nurse needs to become aware of the multitude of lonely and depressed elderly who clearly need a holistic nurse to intervene. There is a need for the nurse to understand how to establish care plans for these individuals and be knowledgeable of resources in their community to assist these clients. The nurse must be able to provide therapeutic empathy at all times and be able to take into account the physical and physiological elements to a person.
**Tobacco Cessation in Older Adults: A Qualitative Study**

Lana Brown, MNSc, RN, NEA-BC  
UAMS PhD student

**Background:** In the United States, approximately 22% of older adults, aged 50 and older, use some form of tobacco product. Tobacco dependence in older adults is a health disparity leading to significant morbidity and mortality reducing their average life expectancy by 15 years with an estimated annual cost of $167 billion in health care costs and lost productivity. Several research studies have examined tobacco use and tobacco cessation in the adult population but few have focused solely on the unique needs of older adults.

**Purpose:** The specific aims for this study are to identify:

1. Motivators, facilitators, and barriers to achieving successful tobacco cessation in older adults, and
2. Motivators, facilitators, and barriers to maintaining prolonged tobacco cessation in older adults

**Method:** A qualitative, phenomenological research approach was used to describe the lived experiences of successful tobacco cessation in older adults, aged 50 years and older, who have demonstrated cessation for one year or longer. Purposive sampling was used to recruit 20 participants. Participants received an IRB approved research information sheet, completed a brief demographic form, and participated in a semi-structured, audio-recorded interview (30-60 minutes) in a location of the participant’s choice. All interviews were conducted by the principal investigator and digitally recorded, transcribed verbatim, and entered into Ethnograph v6, qualitative data management software. Data were analyzed using content analysis and constant comparison. A code book with precise definitions guided data analysis and increased consistency.

**Results:** The common global themes of this study were the quitting process, motivation for quitting, and gaining independence. Self-motivation and personal accountability are key motivators to successful tobacco cessation in older adults. Finding replacements for the habit of tobacco use was an essential facilitator for success. Another facilitator was support from friends, family members, and healthcare providers. Barriers included the level of addiction and various tobacco use triggers for each individual.

**Conclusions:** Sufficient data was generated from the interview questions, and the results will serve as the foundation to develop tobacco cessation interventions for older adults. Future research studies will test the feasibility and success of the developed interventions. Upon intervention study completion, the research findings will be disseminated to health care providers.

**Implications for Nursing:** Targeted or tailored interventions for tobacco cessation in older adults can benefit the healthcare arena by reducing the mortality and morbidity of this population. Assessing for tobacco use and offering cessation assistance is essential for improved health care outcomes for older adults who use tobacco products.
**Restraint Free Care: Chemical and Physical**

Landon Stuart  
Southern Arkansas University

**Significance:** This study was significant due to multiple reports of an opposite effect of the intended purpose of the use of restraints.

**Problem:** The use of chemical and physical restraints has shown to lead to an escalation of patient’s confusion, falls, decubitus ulcers, and length of stay, which has led to multiple injuries, including death. Many Doctors are prescribing some sort of restraint to make it easier for people to take care of these patients.

**PICO format question:** Among the elderly population, is there evidence that doing away with chemical and physical restraints will decrease the number of injuries related to hospital stays?

**Search Strategy and quality screening:** Using the EBSCOhost search engine, I found 5 different articles focusing on restraint free care and reducing the use of restraints.

**Synthesis of Evidence:** After reviewing the five articles I chose, it is clear that reducing the use of restraints or completely doing away with restraints is the best option. Research shows that the majority of the people who are put in restraints tend to develop multiple injuries, sometimes leading to death. These articles outline that there are different methods, other than restraints, that can be used. Simple things such as lowering the height of the bed and using a lap belt with a Velcro release as opposed to a vest restraint without release can be done. Having a sitter at the bedside is another way to reduce the use of restraints and keep patients free from harming themselves or others. MT Antonelli recommended that when restraints are deemed necessary, a tiered approach should be taken into consideration. This tiered approach begins with markers and paper or a deck of cards for distraction and then proceeding up to hand mitts, lap belts, or chair alarms if needed. Vest or limb restraints should only be applied when other methods have been unsuccessful.

**Conclusion:** There is a definitive need for a change regarding the use of chemical and physical restraints. Having person-centered, recovery-oriented, and trauma-informed care principles by the staff makes having a restraint free environment possible. Restraints should be used as a last line resort only when safety is of concern, even then measures should be taken to try and prevent restraint use.

**Implications for nursing practice:** By utilizing this information, all health care providers can help reduce the potential for injuries related to restraint use. Using this information could also help provide a more pleasant hospital experience for patients.
# Benefits of Exercise in the Elderly

Laura Hayes, nursing student  
Southern Arkansas University, Magnolia

**Significance:** Regular physical activity can help elders to maintain and build muscle mass and strength, as well as, improve stability and balance. Exercise can limit the functional impairment caused by diseases and prevent worsening of conditions. Range of motion, the number of falls, bone breaks, dislocations, and sprains can be reduced with exercise. Activities of daily living and overall independence can also be achieved through an increase in exercise.

**Problem (or Purpose):** Physical changes in the musculoskeletal system are an inevitable part of aging. As we age, the body experiences a decrease in lean muscle mass and strength. The standing base is also narrowed, negatively affecting stability, balance, and gait. Range of motion can also become limited in old age. The changes in the body that occur with age can cause significant health issues and possibly lead to a premature death.

**PICO Format Question:** Does regular physical exercise increase positive health outcomes in adaptation to normal physiological changes in the elderly population?

**Search Strategy and Quality Screening:** The search process for evidence-based, scholarly peer-reviewed articles was obtained through EBSCO. Terms used to search for evidence based on the topic were exercise, health benefits, physical activity, and elderly. The articles were obtained through a limited search of the years 2008-2013. All of the studies were randomized controlled trials and most of the studies were limited to the United States.

**Evidence:** After limiting the search to scholarly peer-reviewed articles between the years 2008-2013 and focusing on randomized controlled trials, the results were still pretty large. I reduced this number to 6 by picking the articles with the most detailed information obtained about how the studies were conducted and the health benefits that were achieved through the studies.

**Synthesis of Evidence:** Goals and getting an elderly person in the right state of mind to begin exercising can increase the total effect of physical activity on health outcomes. Throughout the synthesis process, a theme emerged that motivation, encouragement, and education improve overall health and physical activity among older adults. Elastic resistance training, balance and coordination exercises, Pilates, and power assisted devices were all methods of choice for improving health benefits through exercise in the elderly.

**Conclusions and Recommendations:** Based on the current state of knowledge of the benefits of exercise in the elderly, it can be improved through education, counseling, and encouragement. Heart rate and blood pressure were also improved, as well as balance and strength. Overall, elderly people can achieve a healthier, safer lifestyle through physical activity.

**Implications for Nursing Practice:** Obviously, the positive health outcomes of exercise in the elderly are great. Exercise improves muscle strength, coordination, balance, and overall mental status. These things all contribute to a healthier lifestyle and less incidences of exacerbations of disease or further worsening of a condition.
Effective Transition of Elderly to Residential Housing Options

Lauren McCloy
Southern Arkansas University

**Background:** Transition is a phenomenon that occurs throughout one’s lifetime and marks specific stages of an individual’s life. The transition from home to other residential options is becoming a growing interest among older adults, as research suggests that residential relocation may become an increasingly common experience. A person going through a transition in life will almost certainly experience anxiety, fear, and even depression when they are aware that an experience lies outside their range of understanding or control; they are unable to effectively picture the future that is ahead of them. Moving into a nursing home, assisted living facility, or long term care facility are some examples of transition for older adults.

**Purpose (or Problem):** To ease the transition of the elderly to residential housing options with minimal emotional distress.

**Method:** Easing the transition of the elderly from home to other residential housing options can be accomplished through different methods. These methods include awareness of what to expect, socialization among the residents, sense of security, and feeling that the transition was his or her choice. The literature search for this paper was conducted through EBSCOhost. The databases used to search for articles included CINAHL, MEDLINE, Health Source, and ScienceDirect. The findings from the articles reviewed provide a valuable insight related to methods that effectively ease the transition of elderly from home to other residential housing options.

**Results:** From the research studied, there seems to be very little up to date information and experiments conducted in regards to elderly transitions. Research shows that awareness of what to expect, socialization among the residents, sense of security, and feeling that the transition was his or her choice are all significant aspects of effective transitioning. The research reviewed is supported by evidence based practice within the nursing discipline. Although this is true, more qualitative and quantitative studies need to be performed to have a better understanding in this field of residential care.

**Conclusions:** After researching methods to ease the transition of elderly from home to other residential options, I found that transitioning to a residential care facility involves many emotions and difficulties for the older adult. Older people experiencing care transition are in a vulnerable state both physically and mentally. The transition from community to residential care can be particularly stressful and unsettling. It also brings more drastic changes than other types of transition. There should be more emphasis on the importance figuring out methods that benefit the elderly’s transitions.

**Implications for Nursing Practice:** Educating the elderly patient on effective transitional methods when going into a residential housing option.
**Abstract #: 083**

**LaWanda Harris, NS, SAU**  
Southern Arkansas University

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<thead>
<tr>
<th><strong>Evidence for The Effectiveness of Modifying the Geriatric Depression Scale</strong></th>
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<tr>
<td><strong>Significance:</strong> Depression often goes unnoticed and therefore untreated in the elderly. The Geriatric Depression Scale (GDS) has been used for years to screen for depression in the elderly, but the reliability and validity of the GDS is questionable. If the GDS is found to be a reliable screening tool, it can be implemented more often in all healthcare settings. This improves the ability of healthcare professionals to detect depression in geriatric clients.</td>
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<td><strong>Problem (or Purpose):</strong> The GDS has not been used to screen for depression in the cognitively impaired because the accuracy of the tool in patients with impaired cognition is questionable. Also, the consistency of the GDS to generate accurate results makes some people abandon the use of the screening tool. Even with these possible drawbacks, evidence has shown the GDS can be administered in a way that is suitable for the patient being screened. The challenge healthcare professionals face is administering the GDS in an appropriate manner so that the client understands the questions and are comfortable enough to answer honestly.</td>
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<td><strong>PICO Format Question:</strong> Among cognitively impaired and non-cognitively impaired geriatric clients does modifying the administration method and wording of the GDS compared with administering the tools as is increase the reliability and validity of the screening tool to accurately detect depression?</td>
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<td><strong>Search Strategy and Quality Screening:</strong> Databases used during the literature search include EBSCOhost and Science Direct. Search terms used to find substantial literature were reliability, Geriatric Depression Scale, method administration, and accuracy using the Boolean operator AND. Only literature published between 2006 and 2013 were included. Articles including the 5 and 15 question GDS were also included to promote generalizability of findings. Quality screening included using articles that had a clear research method and data analysis.</td>
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<td><strong>Evidence:</strong> 6 studies were selected for the review of literature. The studies were all quantitative. Research designs include cohort studies, retrospective studies, secondary analysis, meta-analysis, and crossover studies.</td>
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<td><strong>Synthesis of Evidence:</strong> After reviewing the articles, modifying the administration method and wording of the GDS can improve its effectiveness. Administration by an interviewer improves the client’s comprehension of the questions. Self-administration by questionnaire improves the honesty for clients who prefer to not speak with an interviewer. Altering the wording of the questions in the GDS can help those with more learning needs understand the questions. In general, the GDS can be modified to effectively screen for depression in geriatric clients.</td>
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<td><strong>Conclusion and Recommendations:</strong> The method of administration and wording of the GDS can be modified to accommodate for the needs of the geriatric client. The GDS is effective in screening for depression in all types of geriatric clients including the cognitively impaired. I recommended that the GDS be used more frequently for all types of geriatric clients.</td>
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<td><strong>Implications for Nursing Practice:</strong> When used for some geriatric clients the questionable reliability and validity of the GDS can prevent healthcare professionals from implementing the tool. Informing the healthcare professionals about how to change the administration method and wording of the GDS can improve the effectiveness of the tool. This, in turn, will help healthcare professionals detect depression in the elderly.</td>
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Bullying and Victimization of Obese Children in School Settings

Liz Walker BSN, RN
University of Arkansas for Medical Sciences, College of Nursing

Significance: Bullying and violence against obese and overweight children is a widespread problem: It involves a power imbalance between victim and bully which often presents itself as physical, social, relational, verbal or cyber bullying. Consequences of bullying and other weight-based victimization can have a multitude of physical and psychosocial ramifications in both the present and the future. As the prevalence of bullying continues to rise, both perpetrators and victims will be at an increased risk of comorbid conditions which can influence future risk taking behaviors.

Purpose (or Problem): The purpose of this literature review was to ascertain and understand the current state of bullying behaviors towards obese children.

PICO Format Question: Do obese children experience more bullying than non-overweight children in school settings, and if so, what are the long term outcomes?

Search Strategy and Quality Screening: A literature review was conducted in CINAHL and PsychArticles. Search terms initially utilized were: bullying, violence, cyberbully, obesity and school. Of the total 33,055 articles, an extraordinarily high number of articles focused on intimate partner violence. Since peer on peer violence was the topic of interest, the term ‘violence’ was removed. The results were further narrowed down by applying the following limits: published years 2003-2013, peer-reviewed, human subjects, child (6-12 years), adolescent (13-17 years) and English language.

Evidence: The search produced a total of 38 articles, from those 11 articles were identified to include in this literature review due to their applicability in answering the PICO question.

Synthesis of Evidence: The literature identified that obese children were at a higher risk of being on the receiving end of bullying from both peers as well as their families. Negative body image and low self-esteem were mediating factors in obesity and bullying. Several themes ran through the identified articles, the most common being: risk for bullying, body image and self-esteem, types of bullying behavior, and the consequences of bullying. Many common health problems and behaviors can be directly attributed to obesity and co-committant bullying, and the literature concurs that long term negative consequences occur with both the victims and perpetrators.

Conclusions and Recommendations: Victimization received in the early developmental years can carry over into adulthood. This can have a negative impact on the health and future risk taking behavior of both the victim and the bully. Identification of individuals at risk is essential in order to provide early intervention and break the cycle of violence.

Implications for Nursing Practice: Practitioners need to be aware of the ramifications that obesity and bullying can have on the mental health of children and adolescents. By partnering with parents, educators and students, we can intervene early and help ensure that the mental health needs of these children are addressed.
**Low birth weight in maternal smoking.**

Macy McMillan, Jennifer Williamson, Mercedes Woodley, Olivia Velasquez
Henderson State University

**Significance:** Many mothers continue to smoke throughout pregnancy even though it is harmful to their unborn child. Maternal smoking can lead to preterm birth, intrauterine growth retardation, small head circumference, stillbirths, and neonatal deaths. Cigarette smoking during pregnancy is thought to contribute to decreased birth weight by two mechanisms. Those two mechanisms are shortened gestation and fetal growth restriction. While quitting smoking should be the final goal for women who smoke, research shows reduction is more likely than cessation during pregnancy. Research concludes that moderate to heavy smokers should reduce their smoking levels to that of light smokers to achieve the same results for non-smokers.

**Purpose (or Problem):** The purpose of this study was to evaluate levels of smoking exposure during pregnancy on infant birth weight outcome.

**PICO Format Question:** Does smoking during pregnancy increase the risk of low birth weight compared to smoking reduction in full term infants?

**Search Strategy and Quality Screening:** An initial search using the term *low birth weight* in the EBSCO database resulted in 8,856 articles. The results were narrowed by the addition of the MEDLINE database and Boolean Operator AND with *smoking*. The search was limited to full text articles published between 2008 and 2013 which resulted in 89 articles. Other limiters were that the articles were written in English and peer reviewed. Further restriction of the search included use of the terms *during pregnancy* which resulted in 73 articles. Reviewing titles and reading abstracts lead to four relevant articles.

**Evidence:** A search of MEDLINE and EBSCO using the search terms *low birth weight and smoking during pregnancy* produced 73 articles. After screening for relevance, four articles were selected for quality critique. The final sample included four research articles.

**Synthesis of Evidence:** Findings from three reports indicated that women who reduced smoking levels to light smoking have the potential of similar birth weight outcome compared to women who do not smoke during pregnancy. One report suggested that women who completely stopped smoking during pregnancy had the same potential birth weight outcomes as mothers who never smoked.

**Conclusions and Recommendations:** After conducting this research project it is concluded that additional research needs to be performed. Nurses need more research and education to provide information to expectant mothers about lower smoking levels to increase birth weight of the infant.

**Implications for Nursing Practice:** Nurses need to be more proactive in educating women of the risk of smoking during pregnancy. Nurses need to counsel expectant mothers regarding the adverse consequences of smoking during their pregnancy and offer behavioral counseling or safe pharmacological aids.
Evidence Based Practices for Diagnostic and Treatment of Blastomycosis: A Case Study

Manuel Heredia, RN, BSN, AG-ACNP student
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Clinical Significance: Appropriate diagnostic and treatment for Blastomycosis is related to symptomology and the process of discovery that involves Computed Tomography (CT), Fine Needle Aspiration and final confirmation of histological identification of lung tissue biopsy. Video Assisted Thoracoscopic surgery (VATS) allows for histological sampling. According to current clinical guidelines, pulmonary function testing (PFT), X-rays, and CT assessments are necessary prior to this procedure. Adequate sampling and identification is necessary for discovery and implementation of adequate treatment. Implementation of guidelines from the Infectious Disease Society of America, treatment for this disease includes Amphotericin B (3-5 mg per kg for 1 to 2 weeks followed by Itraconazole 200 mg daily and 200 mg q 12 hr for 6 to 12 months. Evidence for treatment is rated as A-III (A= good evidence for using treatment, III= evidence based on clinical evidence and expert’s opinions).

Statement of the Problem (or Purpose): Failed treatments with antibiotics and recurrent hospitalizations warranted further discovery and implementation of current evidence for disease identification and treatment.

PICO Format Question: In adult patients with pulmonary infectious symptomology, is Video Assisted Thoracoscopic surgery adequate for proper identification and treatment planning of Blastomycosis?

Literature Search Strategy: The literature search process utilized for this case study included Pubmed, Google Scholar, EBSCO CINHAL, and UptoDate (UAMS database). Search terms utilized for literature search included: Pulmonary Blastomycosis, fine needle aspiration, Video Assisted Thoracoscopic surgery, Amphotericin B, and Itraconazole.

Literature Search Results & Evidence: The literature search resulted in 280 articles specific for current treatment for this disease. Six current articles related to discovery, treatment and pharmacological evidence were selected. These six articles selection criteria included 2 year old or less, academic journals, and those based on the course of the disease identified in this case study. Studies selected were designed utilizing small sample groups and to identify comparative results for different antifungal medications. Incidence and epidemiological data was obtained from the CDC. Ultimately, evidence based information reviewed provided support of appropriate treatment through adequate discovery and identification of disease causing agent.

Evidence from Clinical Case: A 33 year old white male patient with a history of continued and recurrent respiratory difficulties, unsuccessful antibiotic therapy, general malaise, recurrent hospitalizations (x3), 3 sets of PFT (positive for restrictive disease), CT (positive for right middle lobe mass), FNA with inconclusive results, and positive Blastomycosis identification through a VATS procedure. The identified patient is 6’8”, 318 pounds, BMI 34.9, current smoker (5 to 10 cigarettes x day) with no previous history of lung disease. His initial symptoms started as a common upper respiratory infection and he was treated using antibiotics with negative results. A CT was eventually ordered following a hospitalization and a mass on the right middle lobe identified. Histological identification revealed positive antigens for Blastomycosis species and current evidence based treatment (Amphotericin B and Itraconazole) was initiated.

Comparison and Synthesis of Evidence: The articles and guidelines identified during the literature search accompanied by positive outcomes for the identified patient demonstrated the effectiveness of the treatment. The process of discovery was essential for identification of causative agent and application of current evidence treatment necessary for the treatment of Blastomycosis.

Conclusions and Implications for Nursing Practice: The combined evidence from the literature and clinical experience with this patient substantiated the implementation of adequate treatment. A continuation of care and a careful review of history and symptomology were combined with current evidence treatments to appropriately treat the patient identified in this case study. The implications for nursing practice are related to careful follow up of patient care and progression or regression of symptoms, identification and utilization of adjunct treatments (imaging, surgical procedures, etc.), current evidence based practice for treatment and educating patient and families regarding the nature of disease and care.
Clinical Significance: Proper diagnosing of diverticular abscess can be difficult to ascertain due to the complexity of the intra-abdominal process that can represent a multitude of causative agents. Should proper diagnosis not be obtained, further infectious process can lead to sepsis and/or fistula formation into an adjacent organ. Treatment modalities depend upon proper diagnosis, location of abscess, ability to exclude carcinoma along with age and comorbidities of the patient. Thus, inadequate treatment may lead to fulminant peritonitis and eventually death.

Statement of the Problem (or Purpose): In this study, the diagnosis and treatment processes were evaluated for a patient with diverticular abscess that was causing partial bowel obstruction.

PICO Format Question: In elderly patients, which methods are appropriate to diagnose and treat diverticular abscess based on current evidence?

Literature Search Strategy: The literature search included Google Scholar, PubMed, and EBSCO as search engines. Search terms used to locate appropriate literature included colonic abscess, obstructive colonic abscess, colonic stricture, and complicated sigmoid abscess.

Literature Search Results & Evidence: The literature search initially returned 2,800 articles. Articles were further eliminated by excluding pediatrics, diverticulosis, and articles older than 5 years. 14 articles were used for this study. Progression of diverticular complications includes abscess, obstruction, perforation, and fistula all of which account for 25% of diverticulitis cases. Due to vague symptoms reported by elderly, diagnosing abscess formation can be difficult. CT of abdomen is recommended. CT guided drainage is currently in use if abscess can be cannulated percutaneously and is greater than 5cm; decreases mortality & LOS. However, CT guided drainage may have an increased incidence of reoccurrence and/or open CR. Prior guidelines recommended an elective CR (open or laparoscopic) after two incidences of acute diverticulitis; currently surgery is based upon an individual basis. More studies are needed to assess the use of CT guided drainage and laparoscopic procedures for diverticular abscess.

Evidence from Clinical Case: 78 y/o female, c/o vomiting, decreased bm’s, bloating, & vague abdominal pain for three days. CT of abdomen revealed large diverticulum in left mid-colon with narrowing and partial obstruction, neoplasm vs. infection; elevated WBCs w/ left shift, all other lab non-contributory. Admission, NG tube, IVF, Invanz, and surgical consult; resulted w/ open CR & diverting colostomy for a large diverticular abscess (negative for neoplasm).

Comparison and Synthesis of Evidence from Literature & Clinical Case: The literature and guidelines support the decision to perform an open laparotomy d/t neoplasm could not be ruled out with CT; CT guided drainage was not indicated d/t complexity of abscess. Laparoscopic colon surgery could not be performed because of complexity of abscess & surgeon skilled in the procedure was not available at this facility.

Conclusions and Implications for Nursing Practice: The use of accepted guidelines is recommended along with individualization of each patient based upon assessment and diagnostic findings while considering comorbidities. APRNs should use CT as a diagnostic tool and consider CT guided drainage of uncomplicated diverticular abscesses. APRNs can improve patient outcomes by remaining up-to-date with guideline changes and searching for improved diagnostics and procedures for complicated cases.
# Treatment with Dual Therapy for Relapse Case of Hepatitis C

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Central Arkansas Veterans Healthcare Systems  
University of Arkansas for Medical Sciences, College of Nursing

## Clinical Significance:
According to Bhattachaga et al, 2011, viral genotype is the most significant prognostic factor in terms of response therapy. There are six major genotypes (lineage) of the HCV throughout the world. Genotyping has been the critical parameter to determine both likelihood of response therapy as well as the duration of therapy needed to obtain a sustained virologic response (SVR). The patient discussed in this case study is genotype 2b. If his treatment is successful the evidence could be published and possibly help future patients with similar dilemmas. The most challenging part of the case study is the treatment is based on the compliance and honesty of the patient. If he re-infects himself with the virus through IV drug use, he could possibly have a different genotype and may not respond to therapy as he should. If his treatment is not a success, then further research should be done on how to treat patients with relapsed cases.

## Statement of the Problem (or Purpose):
The purpose of this work was to explore evidence from literature, practice guidelines, and clinical setting experience to evaluate dual therapy in a patient who has relapsed with Hepatitis C diagnosis.

## PICO Format Question:
In treating patients diagnosed with Hepatitis C genotype 2b, and receiving dual therapy, does the treatment change for a relapse case versus a non-relapse based on the MELD score?

## Literature Search Strategy:
The literature search process used Pubmed, Google Scholar and EBSCO. Search terms used to locate the appropriate literature were dual therapy, MELD score, Hepatitis C, Cirrhosis, HCV, Pegasy, Ribavirin, Pegaysys/Ribavirin, genotype 2b, liver disease.

## Literature Search Results & Evidence:
The literature search produced an initial total of 14,192. Hepatitis C with MELD yielded 192 studies. Treatment for Hepatitis C with genotype 2b relapse yielded 0 studies. Hepatitis C therapy treatment is administered according to national and international treatment guidelines. Patients being treated are either treated with pegylated interferon or combination of weight based ribavirin. With patient consent, planned treatments durations range from 16 weeks to 48 weeks according to HCV genotype, on-treatment virologic response and MELD scores. According to Dultz, et al 2013, patient’s with a MELD score of 10 or higher has an increased risk of decompensation. The patient in this case study had a MELD score of 8 which would allow him to be treated. However, there is lack of evidence in the literature to support treatment for cases that have relapsed.

## Evidence from Clinical Case:
Pending clearance from the patients’ psychiatrist, Ophthalmologist and dietician, he will be treated with dual therapy. The therapy will consist of ribavirin and peg-interferon. He will be treated for duration of 48 weeks. He previously had a good response to this therapy, were he went into remission, and it was decided by an interdisciplinary team that he could receive treatment again. He has consented.

## Comparison and Synthesis of Evidence:
According to the AASLD updated practice guidelines 2011; patients with cirrhosis and genotype 2b should be treated with dual therapy ribavirin and peg-interferon. They should receive therapy for duration of 48 weeks. The studies for relapsed cases have been done in patients with genotype 1a, but Dr. Suzuki felt since the patients MELD score is 8 and he had a good response previously he was a suitable candidate for dual therapy. In a study done by Dultz et al, it shows that patients with a low MELD score (less than 12) have less hepatic decompensation than patients with a higher MELD score. There should be more research for relapsed cases in patients’ with genotype 2b.

## Conclusions and Implications for Nursing Practice:
Since there is little evidence to support the treatment of a relapsed case in genotype 2b, the care for these patients should be guided by expertise supervision and patient compliance. There should also be an interdisciplinary approach with the care with close observation. The conclusion of this case study is the patient is currently receiving treatment. The outcome is not yet available.
# Abstract #:089

## Global Aging

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**Significance:** Global aging is seen all over the world and has many affects that keep it either rising or falling. As of right now global aging is on the rise and is projected to keep rising as long as we keep or older generations’ health. There are many factors that can be easily changed that can help to increase global aging and increase the quality of life of our elder patients.

**Problem (or Purpose):** The purpose is to teach the significant factors that affect global aging. The problem is that most of the older generations do not realize how much just a little physical activity and a normal sleep pattern can help improve their quality of life. The nurses need to be taught ways to encourage the older generation to resume more physical activity and for today’s younger people to stay active.

**PICO Format Question:** In the aging population, what effects do exercise and sleep patterns have on the global aging rates compared with non-active elders over their life time?

**Search Strategy and Quality Screening:** My sources came from 6 different articles/studies. The names of the articles/ studies are Demography is not Destiny: The challenges and opportunities of Global Population Aging, Association between physical activity and brain health in older adults, physical activity and health-related quality of life among older men: An examination of current physical activity recommendations, the role of physical activity in changes in walking mechanics with age, archives of Gerontology and Geriatrics, and aerobic exercise improves self-reported sleep and quality of life in older adults with insomnia. I used EBSCO Host and Science Direct to look for my Articles. The time frames for the articles were limited to 7 years with the years being from 2013 to 2007. Search titles used were “global aging” and “effects of global aging”.

**Evidence:** Evidence for my topic was found using EBSCO Host and Science Direct. The topic was very broad and I limited the search down to the effects of exercise and sleep patterns on global aging. There were six articles found that I used to discuss this topic. I started with around 10 articles and limited to 6 because the information was similar and helped to show the effects of the topic on global aging.

**Synthesis of Evidence:** To start off the paper goes in to talking about how global aging is on the rise and what affects it has on our older population. After that we will see how physical activity has a lot of different effects on the body as we age and how it changes how our older population age. Then last the paper talks about how sleep affects the body as we age and how physical activity and how sleep can increase the health of our older population therefore increasing global aging.

**Conclusions and recommendations:** With global aging on the rise so quickly we have to change focus on to our older patients. We have to get them physically active because research is showing that increased physical active can help in many ways to increase overall quality of life in a variety of patients. Global aging is going to affect everyone because we all age and we want the best for our older generations. We just have to be aware of the relationship with physical activity and how it affects our body in a positive way.

**Implications for Nursing Practice:** When nurses go in to see their patients they need to be sure to teach about physical activity and healthy sleep patterns can increase aging and improve quality of life. Nurses need to include it in to discharge teaching for their patients.
# Treatment of Pulmonary Embolism in an Older Adult: A Case Study

Melissa Worm, RN, AG-ACNP Student; Brooke Seago, MNSc, APRN, FNP; Dr. Robert M. Searcy, MD  
UAMS College of Nursing; St. Vincent Infirmary

**Clinical Significance:** Pulmonary embolism (PE) is serious and often fatal with an incidence of 70 cases per a 100,000 population. PE risk increases with age doubling every 10 years after the age of 60. Those diagnosed have a 33% chance of recurrent event within the next 10 years.

**Statement of the Problem:** Older adults discharged home after diagnosis of pulmonary embolism are transitioned from a subcutaneous low weight heparin to an oral anticoagulant but is a difficult regimen. The change in medications can be confusing and it requires follow-ups to determine if the dose is therapeutic; both increase in the chances of error. This work’s purpose is to explore a single drug approach with one required dosage changes that provides a therapeutic outcome, prevents patients lost to follow-up, and decrease medication errors.

**PICO Question:** In older adults discharging to home, is Xarelto effective to treat and prevent future PE based on evidence?

**Literature Search Strategy:** The literature search process used Pubmed, Google Scholar, and EBSCO. Search terms used were pulmonary embolism, Xarelto, older adult and outpatient. Search terms resulted in no articles in Pubmed and EBSCO and were changed to pulmonary embolism, Xarelto, and outpatient.

**Literature Search Results and Evidence:** The literature search produced a total of 133 articles. Articles were removed that covered only apixaban, only thromboprophylaxis, and atrial fibrillation. This resulted in 15 articles. Research confirms the standard treatment for PE is a low molecular weight heparin with a vitamin K antagonist but Xarelto was approved by the FDA as a single drug approach for PE and DVT treatment and prevention in November 2012. There is some limitation in the number of trial studies to confirm the validity of the results. Studies show Xarelto reaches therapeutic levels between 2-3 hours eliminating the need for a second medication. Other advantages include no regular lab draws and limited food, alcohol, and drug reactions. Xarelto was noted to have similar efficacy and safety results as compared with standard treatment even with a statically significant increase in the incidence of major and minor bleeding specifically when used as a twice daily regimen. The risk of bleeding is also higher in patients with impaired renal functions. There is no anticoagulant available for Xarelto and there is no readily available way of monitoring its effects. The majority of the articles concluded Xarelto should be prescribed on case by case bases but has growing popularity as prescribers are more aware of it.

**Evidence from Clinical Case:** We treated an 86 year old Caucasian male who presented with increasing shortness of breath. His history noted CHF, prostate cancer, previous spontaneous PE, and a 20 pack year history of smoking. An elevated d-dimer prompted a CTA with findings of emboli in LUL with chronic parenchymal densities in the lingual & lower lobes bilaterally. The patient was discharged home after starting on Xarelto 15 mg twice a day with food for 21 days then decreased to 20 mg a day for 3 months. Treatment was successful and the patient reported an improvement in SOB with and without exertion. No adverse events including other pulmonary embolisms or bleeding were reported.

**Comparison and Synthesis of Evidence:** The literature search with the case study demonstrates the use of Xarelto as a single therapy for the treatment and future prevention of PE is a safe and effective alternative to the standard dual therapy option. Our use of Xarelto in a patient over the age of 75 was only one clinical case. Further studies are needed to assess the benefits and possible harm to older adults before a strong recommendation for use can be given to providers.

**Conclusion and Implications for Nursing Practice:** The evidence from the literature and clinical experience with our older adult patient demonstrate that Xarelto can provide therapeutic results for PEs. Providers should evaluate each patient and scenario to decide the best treatment from the data gathered. A current history and physical should be obtained with labs before the decision to use Xarelto can be determined on any patient especially an older adult. Yet, there is a single drug approach option for patients who might benefit from less lab draws and fewer food and medication restrictions. Prescribers now have an alternative and should keep it as a possibility for treatment on PEs.
# The Importance of Perceiving Support in Victims of Childhood Abuse

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University of Arkansas for Medicals Sciences, Post Masters PMHNP

**Significance:** Nationally and globally, child abuse continues at the hand of parents and other caregivers. The emotional damage to children may be observable in their mood and behavior, but other changes may be less observable. Currently, there is no definable cure to prevent or end child abuse, but children’s perceptions of these events can aid in the development of interventions.

**Purpose (or Problem):** The purpose of this literature review was to collect information about the etiology of child abuse and neglect, the emotional effects on victimized children, and the current interventions implemented for prevention and treatment.

**PICO Format Question:** In children who experience abuse and neglect, what are the significant long-term emotional and behavioral effects compared to those who do not experience abuse or neglect, and are the outcomes different in those who receive treatment?

**Search Strategy and Quality Screening:** Search engines Google Scholar, EBSCO, search terms child abuse and neglect, longitudinal design, child maltreatment, physical abuse, emotional abuse, violence cycle, alcohol abuse, resilience, thriving life, adulthood, foster care. Search years were limited to 2010-2013 and article types were limited to research reports.

**Evidence:** Google Scholar search yielded 720,000 citations was significantly reduced to 20,400 citations with 2010-2013 restriction. A total of 13 articles were selected for the synthesis of literature.

**Synthesis of Evidence:** Single-parent families, low socioeconomic status, and pre-existing childhood mood disorders are high risk factors for child abuse in a home. Current studies support the use of epigenetic research as evidenced by individuals’ inheritable abilities to metabolize certain medications and manage stress. Abused children have diminished cognitive skills compared to non-abused children, which can prevent them from processing information to discontinue the pattern of abuse. However, when a child perceives care and protection from parents, caregivers, teacher, or other influential person, their developmental outcomes are significantly improved. A commonly used mode of treatment for these children and their families is multi-system therapy. It offers parents the opportunity to change their perceptions about providing care and protection, and attempts to keep families together (if possible) to avoid the potential of further experiences of trauma related to the transitions into the foster care system.

**Conclusions and Recommendations:** Survivors of child abuse demonstrate significantly improved outcomes when they perceive true care, and protections from their caregivers, demonstrating the need for effective support from consistent adults in their lives. Ultimately, family structures should be maintained if safety permits. Interventions that utilize a multi-system model show to be effective in developing this support and promoting positive outcomes.

**Implications for Nursing Practice:** Health care professionals are in optimal positions to alter children’s perceptions of care and protection. In particular, mental health nurses can play an active role in identifying familial risk factors of abuse, assessing the emotional and behavioral effect of abuse, and providing individualized interventions to prevent the cycle of abuse.
# Sleep Patterns of Undergraduate College Students

Michelle Taylor, Karrah Clark, Ambrosia Caruso  
Southern Arkansas University

<table>
<thead>
<tr>
<th><strong>Problem and Purpose:</strong></th>
<th>To describe and document the sleep quality, quantity, and patterns of full-time, undergraduate college students and explore the correlation between sleep and performance.</th>
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<tr>
<td><strong>PICO Format Question:</strong></td>
<td>What are the sleep patterns of full-time undergraduate students attending college in rural Arkansas?</td>
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<td><strong>EBP Model/Process:</strong></td>
<td>A standardized questionnaire, which contained the Pittsburgh Sleep Quality Index (PSQI), was used to collect the data. The PSQI is a self-administered questionnaire that rates overall sleep quality and disturbances within a one month time period. On the questionnaire, the PSQI data consisted of 10 questions. To fully evaluate the research data in relation to the research question, 7 demographic data questions and 5 MHI-5 data questions were added to the questionnaire.</td>
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<td><strong>Relevant Literature:</strong></td>
<td>Multiple studies indicate that the amount and quality of sleep has a relationship with performance of work or study (Forquer, Camden, Gabriau &amp; Johnson, 2008; Johnson, Brown &amp; Weaver, 2010; Lombardi, Folkard, Willetts &amp; Smith, 2010; Machado, Varella &amp; Andrade, 1998; Sallinen et al, 2004; and Urner, Tornic &amp; Bloch, 2009). However, cognitive abilities have not been adequately addressed specifically for college students.</td>
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<td><strong>Method:</strong></td>
<td>Participants were selected at various times and locations around the college campus expanding over a two week period. The researchers performed face-to-face interviews to gather data from the respondents through survey.</td>
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<td><strong>Outcomes:</strong></td>
<td>The majority of participants rated their sleep quality as fairly good. Data further indicated that most students reported no disturbances in their sleep patterns. Furthermore, students reported no decline in academic performance.</td>
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<td><strong>Conclusions and Recommendations:</strong></td>
<td>Researchers feel that further study is needed, with consideration given to increasing reliability, validity, creditability, and generalizability. Because the study consisted of only 148 participants out of 2,625 undergraduate students, which is less than 6% of the subpopulation, future studies will be needed in order to get a more accurate representation of the student body in rural Arkansas. Further research is also needed to represent a more diverse section of the student body in order to make the study generalizable. Conducting the study at another college would allow researchers to compare results and provide validity to the study. Data could be further scrutinized to look at correlations between grade point average (GPA) and sleep quality and patterns.</td>
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<td><strong>Implications for Nursing Practice:</strong></td>
<td>If a correlation is made between sleep and performance of work or study, the results could also be useful in making a correlation with work performance of nurses working overtime or night shifts.</td>
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Abstract #:093

The attitudes, perceptions, and knowledge of nurses and nursing students caring for HIV/AIDS patients

Olivia Milstead; Roger McKinzie; Stacy Jennings
University of Arkansas at Monticello School of Nursing BSN program

Significance: Caring for HIV/AIDS patients can be very stressful for under educated nurses or nursing students. HIV/AIDS patients may not be receiving adequate compassionate care worldwide.

Problem (or Purpose): Lack of education and resources to protect nurses and patients with HIV/AIDS may put patients at risk for inadequate nursing care.

PICO Format Question: Do nurses or nursing students globally have the knowledge of HIV/AIDS and appropriate perceptions, and attitudes regarding HIV/AIDS to adequately care for these patients?

Search Strategy and Quality Screening: The literature search process used the CINAHL and PubMed databases. The search terms used to locate appropriate literature were Caring for HIV patients – HIV or AIDS, Nur*, Attitudes or car* were limited to English Language, search years were limited to 2008-2013. The final sample included eight research reports which were critiqued for quality.

Evidence: The search terms yielded 4416 hits but narrowed to 1170 after date limiters were applied. Of 1170, 14 were reviewed for relevance. The final sample included eight research studies.

Synthesis of Evidence: Nurses and nursing students with increased level of education on HIV/AIDS and transmission provided more empathetic care to HIV/AIDS patients worldwide. In addition, most nurses/nursing students with more experience in caring for HIV/AIDS patients had more positive attitudes with exception of the Turkish nurses studied. When safety equipment was available fear of contagion was decreased in patient care. In seven of the studies further education was recommended, the other study suggested further role definition for nurses. One study found that increased age and experience with HIV/AIDS patients led to poorer attitudes.

Conclusions and Recommendations: Research reports in this research study indicate that when knowledge is low attitudes are negative. Educating all nursing staff and students on proper protection and transmission of HIV/AIDS may improve the quality of care provided to HIV/AIDS patients. Further education may also reduce stigmatization with HIV/AIDS patients. Nurse educators may need to incorporate more information during basic nursing education or place students with preceptors who provide care for HIV/AIDS patients.

Implications for Nursing Practice: If nursing education is standardized globally to include a nonjudgmental presentation of HIV/AIDS and psychosocial support to nurses, nursing students, and patients is given, then patient care for HIV/AIDS should improve. Working with preceptors who care for HIV/AIDS patients may improve students’ attitudes and perceptions and increase their knowledge, resulting in improved care in this population of patients.
Abstract #:094

<table>
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<th>Models of Long-Term Care</th>
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<td>Olivia Tate, SAU SN</td>
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<td>Southern Arkansas University</td>
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**Significance:** Long-term care (LTC) facilities continue to be a major place for individuals to reside who require professional healthcare, particularly the elderly population. Care provided to this population is facing extreme change and new modern models of care are taking precedence over traditional methods. Families whose loved ones reside in these facilities are advocating for a community-based model of care. Research has shown that what we know as “culture change” has increasingly improved the quality of care for residents living within these facilities.

**Problem (or Purpose):** Modern LTC facility models of care, such as the Green House Effect and the Eden Alternative, have proven to be significant in the quality of care of residents who reside in such facilities. These models of care also have shown to be very beneficial for healthcare professionals and other employees who are employed as well.

**PICO Format Question:** Does LTC reform and the change to new models of care prove to be more beneficial than current care models?

**Search Strategy and Quality Screening:** The literature search process used CINHAL and Google Scholar databases. Some key words used are: Institutional care, culture change in long-term care, long-term facility models of care, Green House Effect, The Eden Alternative, and changes in long-term care. Search years were limited: 2008-2013 and article types were to be peer reviewed journals.

**Evidence:** Six research articles were found of which all had adequate information on this topic; and were all peer reviewed.

**Synthesis of Evidence:** Examined articles indicate that a large number of concerns regarding the quality of life of individuals who live in LTC facilities. Care models have shown to improve this deficit and have also increased job satisfaction of employees.

**Conclusion and Recommendations:** Culture change in LTC is needed. Resident’s quality of life depends on improved care models.

**Implications for Nursing Practice:** When LTC facilities consider adopting new models of care, they should take heed to the evidence and adopt a model that resembles that of the Green House Effect or the Eden Alternative to improve the livelihood of their resident’s.
Problem and Purpose: Tobacco use is the single most preventable cause of premature death and disease in the United States yet 13% of nurses and an unknown number of nursing students smoke or use other tobacco products. Tobacco use harms the student and inhibits tobacco cessation conversations with patients. The study had 3 aims: 1) Determine the feasibility of using the suggested methodology of the Global Health Professions Student Survey (GHPSS) in Arkansas; 2) Describe (a) the tobacco use among third year BSN students in Arkansas, (b) exposure to second hand smoke (SHS), (c) attitudes toward the nursing role in tobacco cessation and current tobacco control measures, (d) behaviors associated with tobacco use and cessation attempts, (e) presence of tobacco control curriculum and training, and (f) demographics of the sample of third-year BSN students in Arkansas, and; 3) Identify significant relationships between (a) types of tobacco product(s) used and gender, (b) degree of nicotine dependence and view of nurse’s role to advise tobacco users to quit; and (c) tobacco use and desired nursing specialty.

Method: This descriptive, cross-sectional statewide pilot and feasibility study using a standardized, self-administered survey developed by the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) with defined sampling procedures and methodology. All BSN programs in Arkansas (11) were asked to participate. All students meeting inclusion criteria were offered the survey following informed consent during a required nursing class. Descriptive statistics were used to determine tobacco use and Chi2 was used to determine significant relationships with significance set at the P<.05 level.

Results: School response rate was 73% (8/11) with an in-class students response rate of 99.8% (516/517). Overall tobacco use was 25.6% (n=132). Of those, respondents self-reported themselves as cigarette users (16.1% [n=83]) and other tobacco product users (9.5% [n=49]). Dual use of cigarettes and another tobacco products exists (3.9% [n=20]). Tobacco products used by students included cigarettes (50%), cigars (18%), hookah (16%), smokeless tobacco (10%) and other (6%). SHS exposure was reported by 54% (n=279). Students want to be positive role models (99%, n=508) and 91% (n=471) want to advise others to quit smoking but 68% (n=352) are not being taught evidence-based practice (EBP) guidelines and do not believe a tobacco cessation intervention by a nurse would be effective (p=.01). The standardized methodology was feasible in Arkansas. Males reported using smokeless tobacco (chew, snuff) significantly more than females (p=.022), no significant relationship between degree of nicotine dependence and the view of the nurse’s role to advise tobacco users to quit, nor was there a difference between users, non-users and their choice of nursing specialty.

Conclusions: Tobacco is being used by a quarter of the nursing student population surveyed in Arkansas BSN programs and cigarette use by nursing students is above the Healthy People 2020 goal of 12% and below both national and state rates, 19.6% and 25%, respectively. Tobacco users want to help patients quit but are not educated in the EBP guidelines resulting in decreased confidence in their ability to help patients quit tobacco use.

Nursing Implications: Tobacco use and lack of education in tobacco cessation techniques are barriers to addressing the tobacco use of patients. Tobacco control education and cessation opportunities must be provided for students.
Fusobacterium Pneumonia in Immunocompetent Host, a Challenging Diagnosis
Associated with Life-Threatening Complications.

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University of Arkansas for Medical Sciences, College of Nursing

**Clinical Significance:** Anaerobic pneumonias account for 5-15% of all pneumonias and are more commonly seen in elderly, debilitated or immunocompromised patients, where aspiration plays a significant role. *Fusobacterium necrophorum* is an anaerobic bacterium commonly associated with upper respiratory infections. This organism may rarely cause pneumonia, and characteristically affects young, healthy individuals. Diagnosis is particularly challenging given the rarity of the condition, the fact that anaerobic sputum cultures are not part of the routine workup, and current guidelines that don’t recommend empirical anti-anaerobic treatment in an outpatient setting. Maintaining a high degree of suspicion is critical, as late diagnosis leads to serious and potentially fatal complications such as Lemierre’s syndrome and sepsis.

**Statement of the Problem:** The purpose of this work was to assess the evidence from published articles, systematic reviews, practice guidelines and a case study regarding diagnosis and treatment of this entity.

**PICO Format Question:** In young, immunocompetent patients, which diagnostic and therapeutic strategies for Fusobacterium pneumonia are supported by current evidence?

**Literature Search Strategy:** Literature search used EBSCO, PubMed, Google Scholar and Ovid; terms used - Boolean/Phrase: Fusobacterium, pneumonia, anaerobic, lower respiratory infections-diagnosis and treatment.

**Literature Search Results & Evidence:** The initial literature search produced a total of 107 studies. Research in adults, humans, 2003-2014 was included leaving 12 studies. Diagnosis of *fusobacterium* pneumonia was done through anaerobic cultures obtained for bronchoalveolar lavage, transbronchial aspiration, percutaneous lung needle aspiration or blood cultures. Current guidelines recommend bronchoalveolar lavage although only one study validated this approach. All 12 studies recommended initiating empiric treatment with Clindamycin or Metronidazole given the slow growth of cultures. Also, all studies recommended considering an US Doppler of the neck to rule out septic thrombosis if the internal jugular veins (Lemierre’s syndrome).

**Evidence from Clinical Case:** 44-year old Caucasian male without relevant medical history, presenting with a 1-month history of dry cough and fever. He was diagnosed with pneumonia by PCP and completed two courses of Levofloxacin without symptomatic or radiologic improvement. Physical Examination: In no distress, 101°F, tachycardia, and dullness in RUL. CBC: leukocytosis with left shift. CRX was consistent with RUL pneumonia - unchanged from a month ago while CT showed no cavitation or masses. Bronchoscopy with anaerobic culture via bronchoalveolar lavage was positive for *F. necrophorum*. The patient was treated with IV Clindamycin 600 mg q8hr for five days, followed by ten days of oral treatment. Doppler of the neck was negative.

**Comparison and Synthesis of Evidence:** Current guidelines, literature search and the case study demonstrate that the best approach for diagnosing *fusobacterium* pneumonia is an anaerobic culture. When the condition is suspected, quantitative cultures of bronchoscopy aspirates using bronchoalveolar lavage or protected brush catheter must be obtained. The evidence supports the use of IV anti-anaerobic antibiotics such as metronidazole or clindamycin. Penicillin is not a good option anymore due to antibiotic resistance observed in recent series.

**Conclusions and Implications for Nursing Practice:** Pneumonias caused by *Fusobacterium necrophorum* are rare, and do not follow the “classic” clinical patterns or risk factors associated with anaerobic pneumonias. They usually present in young, immunocompetent individuals without history of aspiration, putting these patients at risk for delayed diagnosis and life-threatening complications. The APRN must be familiar with this condition and maintain a high index of suspicion in patients not responding to therapy. Anaerobic cultures -ideally through bronchoalveolar lavage and cervical US are mandatory when the condition is suspected. Further studies are recommended to validate the use of bronchoalveolar lavage in the diagnosis of the condition.
Evaluating the Validity and Reliability of the Katz IADL Geriatric Scale

Raul Quintana NS, SAU
Southern Arkansas University BSN Nursing Department

**Significance:** One of the most important statuses that need to be addressed when caring for an individual is establishing his or her current physiological state. These states can be summed up as being the activities of daily living.

**Purpose (or Problem):** The Katz Index has been around since the 1950s and it has served as an objective measurement that establishes a numerical visual measuring the ADLs of an individual.

**PICO Format Question:** Is the Katz Index a reliable and valid tool to be used in the clinical settings? How does this tool contribute to monitoring an individual’s current physiological state and needs.

**Search Strategy and Quality Screening:** I used online resources provided by our school. Some of these databases include EBSCOHost, JAMA, International Journal of Geriatric Society, and Journals of the American Geriatric Society (JAGS). The keywords I used were Katz Index, geriatric assessment, and assessment tools. To narrow down my searches I added validity and reliability.

**Evidence:** At first, I had reset the date settings so it would only give me research done from 2008 and younger but I had to use articles older than 2008 to have enough articles for my topic.

**Synthesis of Evidence:** One of the ways to assess reliability of a tool is to measure its consistency. All of the articles read gave the Katz Index a p-value of either less than or equal to 0.05. The Katz index is also a generalizable tool to be used in the elderly population. This tool also has its weaknesses. There were a couple of weaknesses that were found in the study. Some of the weaknesses were numbers and subjectivity in the study.

**Conclusions and Recommendations:** The Katz Index has both its strengths and weaknesses. Some of its strengths are that It is reliable, generalizable, and it has a high predictive value also. Some of the weaknesses are that there is a lack of validation, probability of bias in the studies, and the data is subjective.

**Implications for Nursing Practice:** The literature suggests that the Katz Index of Activities of Daily Living is a reliable tool. It can help the nursing practice by giving the nurse or any health care provider a measurement of where the individual stands on Maslow’s hierarchy of needs. This measurement can serve as a starting point for our patients.
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<th>Effects of Different Contraceptives in Treating Pain Associated with Endometriosis</th>
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<tr>
<td>RayDawn Henthorn, Brittany Porter, Mariah Brown, &amp; Katelyn Tucker</td>
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<td>Henderson State University</td>
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**Significance:** Endometriosis is an often painful disorder in which tissue that normally lines the inside of the uterus grows outside the uterus. This condition is a common, poorly understood, and extremely debilitating benign gynecologic condition. Endometriosis has a prevalence rate of 7-10% of the normal, female United States Population, but can be as high as 80% in women with chronic pelvic pain. It is important to have evidence in proving effective treatments to alleviate the pain associated with endometriosis.

**Purpose (or Problem):** The purpose of this evidence based practice project was to examine the effectiveness of different types of contraceptives when treating symptomatic endometriosis.

**PICO Format Question:** “In women, of reproductive ages, what is the effect of oral contraceptives in comparison to other contraceptives in the treatment of pain associated with endometriosis?”

**Search Strategy and Quality Screening:** To discover the effectiveness of different contraceptives the project team used the Huie Super Search database to search for the key terms treatment of endometriosis, contraceptives, and pain, published between 2008 and 2013; with the limiters: English; PDF full text; peer reviewed. The research sample reports examined the different contraceptives that are used to treat endometriosis and their effectiveness in comparison to each other.

**Evidence:** A search of Huie Super Search using the search term treatment of endometriosis, contraceptives, and pain produced 4024 research reports. After the limits of English, PDF full text, peer reviewed, and published from 2008 to 2013, only 998 were yielded. After screening for relevance, four articles were selected for quality critiques. The final sample included to four research articles that were yielded.

**Synthesis of Evidence:** Findings from four reports indicate that contraceptives play a significant role in the process of treating pain related to endometriosis. Several reports demonstrated that oral contraceptives were the best choice when treating pain because of their low cost and minimal invasive techniques. One report demonstrated that low does contraceptives can be used in treating symptoms of endometriosis.

**Conclusions and Recommendations:** The results of this study suggest that oral contraceptives tend to be more effective in the treatment of pain related to endometriosis. However, further research needs to be conducted in order to be certain.

**Implications for Nursing Practice:** Knowing about the prevalence of endometriosis along with symptoms and the most effective treatment options would be useful to nurses in the gynecological field who may encounter patients with complications related to endometriosis.
### Therapeutic Compliance among the Elderly

Robbie Portmann  
Southern Arkansas University

**Significance:** With the advancement in medicine, the population is starting to live longer. Helping improve the quality of life is important for geriatric patients. To see better results for the prescribed treatments, the patients must be compliant. Research aimed at promoting adherence will help geriatric nurses implement these strategies to encourage a higher level of wellness.

**Purpose (or Problem):** Geriatric patients take up the majority of health care professional’s time. Without the patients following prescribed medications, the conditions worsen; thus, more health care interventions are necessary. Investigating reasons for non-adherence will help determine interventions necessary to promote compliance among all prescribed therapies.

**PICO Format Question:** What are the factors that influence geriatric patients to continue or discontinue prescribed therapies after initial visit with a healthcare provider?

**Search Strategy and Quality Screening:** This research was pulled from a variety of online databases including PUBMED, EBSCO, CINAHL, and Science Direct Database. The search terms used were *geriatric, compliance, therapy,* and *adherence*. While inserting these words, the Boolean option was selected where the article must contain both of the key words. The search was limited to the years 2007 to present. They have all been peer-reviewed.

**Evidence:** There were numerous studies available with this data. Upon searching, research showed that cultural barriers, subsequent medical conditions, increased health care demands, and the negative effects of therapy on daily living impacted the compliance rates among geriatric patients.

**Synthesis of Evidence:** Interventions are needed to help increase the compliance rates among the elderly. The research articles did have some difficulty finding appropriate interventions for healthcare staff and families; however, it pointed out some key features that hinder therapeutic adherence. Overall, the research showed that the factors contributing to the compliance decline can be overcome with proper interventions from healthcare staff.

**Conclusions and Recommendations:** Simple nursing interventions targeted to the factors that inhibit compliance can be included in each patient’s care plan. These small gestures can break down the compliance barriers and allow geriatric patients to reach an optimal level of wellness.

**Implications for Nursing Practice:** Nurses should aim to keep their patients feeling their best. Some simple interventions can help the client understand the need for therapeutic compliance. Include all assessments such as cultural, cognitive, and history and physical to assure that the patient will benefit from the nursing actions. For those with a decreased cognitive function, include the family/caregivers in the teaching. Also be sure to have case managers involved to help alleviate worries about finance, care, and etc. As a nurse, it is also important to make a medication reconciliation form that is easy to read and is easy to understand.
# Prescription Medication Use Among Self Neglecting Elderly

Rodneshia McClellan  
Southern Arkansas University

**Significance:** The study has the potential to help solve the problem of medication mismanagement which is currently faced in practice. The study describes how health care professionals can help reduce fear of abuse and misuse of self-neglecting elderly.

**Purpose (or Problem):** The problem statement in this study is “The fear of abuse often results in failure to adequately treat symptoms such as anxiety, pain, and insomnia. In other cases, the misuse of prescription medications involves inappropriate prescribing or monitoring by health care professionals”.

**PICO Format Question:** Among older adults taking prescription medications what is needed to decrease the constant misuse?

**Search Strategy and Quality Screening:** The literature search process used EBSCO and JSTOR

**Evidence:** The strengths in this study are that data obtained within the home improves the accuracy of medication lists, which often fail to reflect the medical record, and also interviews, categorization of medical diagnoses and medications, and administration of depression and pain assessment were performed by two individuals in a standard and consistent fashion, thereby improving the reliability of the data.

**Synthesis of Evidence:** The examined articles indicate that medication misuse is a recurring problem within the elderly and more research is needed to help fix the problem.

**Conclusions and Recommendations:** The conclusions of this study are justified by needing more research done on this subject. This article states that qualitative techniques may provide additional information regarding the natural history, indications for use, and the consequences of misuse of Schedule II-IV prescription drugs in this vulnerable population. My overall impression of the article is that this article is a great way to understand what the elderly population needs to decrease their medication misuse.

**Implications for Nursing Practice:** To make sure a good explanation to the elderly that they will not become addicted to medication when taking it for a short period of time. Also nurses should thoroughly explain medications therapy and side effects to the elderly because they may stop taking a medication and not let their primary health care provider know.
Abstract #: 101

**Relationship of Bar Code Administration VS. Non-Barcode Medication Administration in Reducing Medication Errors**

Roseline Agborsangaya, Jannatul Chowdhury, Pamala Himon, Cristina Jack, Jenisa Johnson
Henderson State University

**Significance:** Bar code medication administration is used to prevent medication errors in the acute care hospital setting. If bar code medication administration decreases medication errors, it would be important to implement this practice in all healthcare settings.

**Purpose:** Patients in acute hospital settings have experienced significant side effects due to medication errors. The side effects range from nausea and vomiting to death; however, with bar code medication administration, medication errors have decreased significantly.

**PICO Format Question:** In acute care facilities, what is the effect of bar code medication administration in comparison to non-barcode medication administration on reducing medication errors.

**Search Strategy and Quality Screening:** In the literature research process Pubmed, ProQuest, and Huie SuperSearch databases were used, producing a total of 1576 total studies. Limitations included: publications dates of 2009-2013, medication errors, and bar code medication administration, non-bar code medication administration, acute care and adults receiving care in the acute care setting.

**Evidence:** The search produced an initial total of 1576 studies. The number was reduced by eliminating all studies except articles from 2009-2013, medication errors, and bar code medication administration in comparison to non-bar code medication administration. We limited the results to adults receiving care in the acute care setting. Article relevancy was determined. Five articles were used chosen for the study.

**Synthesis of Evidence:** The research articles indicated that bar code medication administration (BCMA) methods decreased medication errors. The patient’s five rights (right patient, right dose, right route, right time, right drug) must be verified before medication administration. Bar code medication administration provides easy access to a decision support tool for drug information and interaction checking at the point of delivery. Overall, the evidence of the studies shows a reduction in medication errors when using BCMA in acute care settings.

**Conclusions and Recommendations:** Bar code medication administration has supporting evidence of reducing medication errors; therefore, we recommend all acute care facilities incorporate BCMA methods when administering medications.

**Implications for Nursing Practice:** Bar code medication administration is very important in nursing because it addresses the main priority, which is patient safety. BCMA strategically insures that a nurse must verify all rights before administering medications.
# Diagnosis and Treatment of an Empyema: A Case Study

**Sam Raney BSN, RN, AG-ACNP Student**  
University of Arkansas for Medical Sciences, College of Nursing

**Clinical Significance:** An empyema is an infection in the pleural cavity. Treatment is most often conducted in the ICU due to the serious systemic nature that an empyema can cause. This illness is not an infection of the lung but an infection between the lung and chest wall. Symptoms associated with this include shortness of breath, tracheal deviation, fever, lethargy, chest pain, and nausea, among others. CT scan is highly effective in differentiating empyema from other illnesses. This illness is challenging to treat due to the possibilities of hemothorax, pneumothorax, pleural effusion, and the differences in treatment for each diagnosis. The consequences of misdiagnosis or no treatment would be respiratory failure, sepsis, and possibly death.

**Statement of the Problem (or Purpose):** The purpose of this work was to review evidence from the case and examine evidence from literature, practice guidelines, and clinical settings to evaluate the treatment of an empyema.

**PICO Format Question:** In the adult population, which methods are most appropriate to diagnose and treat an empyema in the clinical setting based upon most current evidence?

**Literature Search Strategy:** The literature research process started with the UAMS library and consisted of Google Scholar, Up-To-Date, and Pubmed. Terms searched to locate appropriate literature were Treatment of Empyema, Diagnosing Empyema, Empyema and Chest Tube, Chest Tube use.

**Literature Search Results & Evidence:** The literature review consisted of 5 studies all from the year 2009 to present. These were reduced to 2 pieces where the literature was used in the poster. This literature was consistent in the diagnosis and treatment of an empyema.

**Evidence from Clinical Case:** The patient in this case was a 62 year old male who presented to an outside emergency department with shortness of breath, lethargy, fever, and chest pain. After the initial treatment involving chest x-ray and chest CT. Once the diagnosis of empyema was found the outside hospital transferred the patient for ICU admission and surgical consult. Once at the ICU antibiotics were started and a surgery consult was ordered. The next day a Video Assisted Thoracoscopy Surgery (VATS) was conducted to evacuate the infection and a chest tube was placed.

**Comparison and Synthesis of Evidence:** During this study, the literature and guidelines supported the treatment of this patient. The use of a VATS procedure and chest tube was well documented in the literature as effective ways of treating an empyema.

**Conclusions and Implications for Nursing Practice:** The combined evidence from the literature and the clinical experience review concluded that our patient was treated in an evidence based manner and showed improvement throughout his hospital stay. The VATS procedure along with the chest tube proved to evacuate the infection and reinflate the lung, as evidenced by chest x-ray and CT, along with the return of breath sounds.
Abstract #: 103

**Effects of Tai Chi on the Gerontological Population**

Sarah Emerson, SAU, NS
Southern Arkansas University, College of Nursing, Bachelors of Science in Nursing Student.

**Background:** Older individuals have too high of a prevalence of falls, chronic diseases, mobility debilitation, and depression. Most of these physiologic changes are a part of the normal aging process, but the severity of these problems have a lot to do with life style choices. A group activity, such as Tai Chi can significantly decrease falls, chronic disease, debilitation, and depression. Tai chi originates from Traditional Chinese Medicine, its components include slow movements, meditation, and deep breathing. Although Tai Chi is not a vigorous exercise, it is moderate enough in intensity to enhance physical health. The meditation and deep breathing portion of Tai Chi promotes emotional well-being. An isolated elderly person who participates in group Tai Chi also receives social interaction which is extremely important for their psychosocial health.

**Purpose:** Reduce morbidity and mortality within the gerontological population by providing an effective exercise. Tai Chi addresses the body holistically, which supports reasoning of why it should be taught in groups in long-term care facilities, churches, or community centers to keep our elderly happy and healthy.

**Method:** The literature search process used Science Direct which provided numerous articles to reinforce the positive impact of Tai Chi. I put “Tai Chi” in the first search box selected “AND” to extend my key words, then put “elderly” in the second search box. All of my articles are prevalent, or they have all been conducted in the past 5 years. The articles within this literature review identify major health issues the elderly have, and how Tai Chi can improve that particular problem. The search produced hundreds of studies. A majority of the scholarly articles were eliminated because they had already been systematically reviewed. Studies were eliminated if the topic did not cover relevant problems within the older population. Studies were not used if the research did not include Tai Chi as the dependent variable.

**Results:** The swimming group and Tai Chi group both had better hand-eye coordination than the control group, but the Tai Chi group was the best in the balance test (Wong, Chou, Huang, Lan, H. Chen, Hong, C. Chen, Pei, 2011). Cardiovascular disease, cancer, heart failure, and diabetes correlate with abnormally high IL-6. The IL-6 levels increased in the health education group, and had a modest decrease in the Tai Chi group (Irwin & Olmstead, 2010). The “adherent” group, attended 80% of Tai Chi sessions, had improved cardiac output, LV contractibility, cardiac index, stroke volume, and SVR compared to the “non-adherents” (Huang & Wang, 2011). The Tai Chi group had a larger reduction in depression symptoms than the health education group (Lavretsky, Alstein, Olmstead, Ercoli, Riparetti-Brown, Cyr, Irwin, 2011). Eye-hand coordination was more proficient than those older adults in the control group who did not practice Tai Chi. Better hand-eye coordination leads to less falls (Pei, Chou, P. Lin, Y. Lin, Hsu, Wong, 2008). A basic squatting position in Tai Chi was used to increase muscle strength of the knee flexion. An extended duration would need be required to see if improvement in muscle strength and ankle flexion takes place, which is what usually prevents falls (Li, Xu, & Hong, 2009). The Tai Chi group did have shorter preparation time, shorter foot contact time, and a wider step backwards than the control group (Wu, 2012). “Tai Chi Easy” evaluates how well the program works with our diverse elderly population across the United States. The “Tai Chi Easy” subjects had a decrease in stress, increase in restful sleep, a slight decrease in pain, and a significant increase in energy (Jahnke, Larkey, & Rogers, 2010).

**Conclusions:** Recommend that future elderly patients practice Tai Chi. This exercise has easier movements for frail older adults, but has the same benefits as doing an aerobic exercise.

**Implications for Nursing:** It is very important when nurses are compiling a care plan for a patient to consider the positive effects that exercise has on all humans. When providing care for an elderly patient the same plan must be applied but adjusted for their time in the life span. To decrease prevalence of falls, chronic diseases, mobility debilitation, and depression in the elder population nurses should encourage their elderly patients to get involved with Tai Chi exercises.
### Review of Literature: HARP

Savannah Quintana, NS, SAU  
Southern Arkansas University College of Nursing

| Background: | The Hospital Assessment Risk Profile (HARP) is an assessment tool of the elderly upon admission into the hospital. This assessment tool’s goal is to determine the risk or lack of risk of an elderly person going into functional decline due to acute hospital admission. |
| Purpose: | To evaluate the effectiveness of the HARP as an admission screening tool. |
| Method: | Literature Review: Literature was obtained on this topic via many sources. The first article was found by searching the databases in EBSCO host. The article was retrieved from the Journal of Clinical Nursing and is a systematic review of certain screening instruments, including the HARP. The second article was also found via EBSCO host and the Journal of Clinical Nursing. However, instead of being a systematic review, this article compares the HARP and other assessment tools to each other to determine reliability and validity. The third article was found by EBSCO host in the Nursing Economics database. This article shows the cost effectiveness of assessment tools and their ability to predict the cost of a patient’s stay. The fourth article was found by JSTOR in The American Journal of Nursing. This article shows the reliability of the HARP tool. The final article was obtained by ScienceDirect in the International Journal of Gerontology. This shows the HARP tool and how it relates to discharge planning. |
| Results: | The HARP tool has been around for more than 30 years, but the amount of study on the reliability of this tool is very small. Articles were difficult to obtain and stemmed back many years. The amount of grey area did not improve when these articles were found either. The miniscule amount of research done on this assessment tool leads to the conclusion of two things. One being that the tool is just accepted by the medical community to work, or the second being that not enough hospitals use this tool for it to be relevant enough to study. Another thing to note is that the HARP tool asks for very broad information, leading the medical professional to believe that the patient may or may not be at risk, but the test does not go into enough detail to show what risk these patients are at. Other instruments such as the Katz Index or the Lawton scale go into more detail to help the professional prevent these problems. |
| Conclusions: | More research is needed on this tool specifically to determine whether or not this tool should be used in place of other tools such as the Katz Index or the Lawton scale. |
| Implications for Nursing: | The elderly population takes up a majority of the medical-surgical area of nursing and with a reliable decline screening tool better patient outcomes and earlier discharge could be achieved. |
### Abstract #: 105

#### Posttraumatic Stress Disorder in the Elderly

Shemeka Martin  
Southern Arkansas University

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<th><strong>Background:</strong> Posttraumatic Stress Disorder in the Elderly may be a cause of childhood trauma and many other causes.</th>
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<td><strong>Purpose:</strong> The purpose of these studies was to explore the experiences of the elderly who experience Posttraumatic Stress Disorder.</td>
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<td><strong>Method:</strong> The methods used were via Central Person Register six weeks after the death of a spouse, study participants were recruited from population-wide demographic information provided by the population registry administered by Israeli Ministry of Interior, longitudinal study that was performed routinely from 1973 until 2010 and another that was performed 20 years after a war, by a survey of male military veterans, and a cross-sectional study performed three years after the Wenchuan Earthquake in China.</td>
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<td><strong>Results:</strong> Several research studies have found that bereaved elderly people have found that a normal reaction to bereavement is post-traumatic stress, interventions does not cure pain and posttraumatic stress was significantly more frequent among the elderly bereaved people. Posttraumatic stress disorder was found to be in individuals who experienced childhood trauma, Holocaust survivors, veterans and by the trauma of Prisoners of Wars and individuals who experienced earthquakes.</td>
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<td><strong>Conclusion:</strong> Posttraumatic Stress Disorder can be cause from several different situations. Every individual deals with the disorder differently. Individual’s physical condition can be diminished due to the disorder; early treatment is vital. The disorder should not go untreated. Aging has been known to be the highest factor in posttraumatic stress due to elderly individuals having several problems such as diminished physical health and low financial status.</td>
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<td><strong>Implications for Nursing:</strong> Posttraumatic Stress Disorder is better controlled in the community compared to the earlier centuries. There is more education needed to teach the community. Some individuals are not familiar with the symptoms and some may believe that this is a normal grieving process. This could lead to major problems if treatment is not started early. More research is needed in the community for individuals who experience death of loved ones and experience major life changes such as amputations and chronic illnesses that changes a patient lifestyle.</td>
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Interventions to Improve Blood Pressure Control in African Americans

Shuntar Scott, Ammie Garcia, and Elisa Mendiola
University of Arkansas at Monticello, SON, BSN Program

Problem and Purpose: Prevalence of hypertension (HTN), treatment non-adherence, and associated complications are higher in African Americans than their white counterparts.

PICO Format Question: In African Americans with hypertension, what interventions improve control and adherence and decrease long-term complications?

Search Strategy and Quality Screening: EBSCO, CINHAL, and PubMed were searched using the search terms hypertension, African American, and drug adherence with the Boolean operator AND. Limiters included research reports, HTN in adult African Americans in peer-reviewed journals from 2008-2014. We excluded studies from outside the United States.

Evidence: The search initially yielded 484 studies. Limiting to full text resulted in 18 research reports. Quality critiques resulted in a final sample of eight articles.

Synthesis of Evidence: Results from three of the studies revealed no change in treatment adherence. One study showed increase in treatment adherence, but it was not sustained after four months. One study showed an increase in medication adherence after a behavioral intervention. Another study reported that increased trust in the provider was associated with increased medication adherence. One study’s findings indicated that a 12-week educational and physical activity intervention increased medication adherence and decreased blood pressure. However, there was no long-term follow-up.

Conclusions and Recommendations: African American patients with hypertension may benefit from educational and other interventions. However, more longitudinal studies are needed.

Implications for Nursing Practice: To decrease long-term complications, nurses are in a position to encourage medication adherence and educate African American patients with hypertension. Future studies are needed in this high-risk population.
### Predictors of Longevity: Live a Long and Healthy Life

**Solena Rogers**  
Southern Arkansas University, College of Nursing

**Significance:** Most people desire to live long and healthy lives, but the secret to longevity has remained elusive. The literature varies in the considerations of whom the authors categorize as living exceptionally long lives. While we all want to believe that living a healthy life style will ensure a long and healthy life, most of the research does not entirely support this hope. The literature suggests that we have as much control over our lifespan as we have over who our parents are.

**Purpose:** The major key to living to 100 years and beyond is dodging the top three killers: cardiovascular disease, cancer and dementia. These chronic diseases pose major barriers to successful aging. In a person’s sixties they are at highest risk for cancer, in their seventies they are at risk for cardiovascular disease and their eighties and beyond they are at risk for dementia. Research suggests that living a healthy lifestyle can add up to eight years to a person’s life span, but how much influence does lifestyle really have on the aging process?

**Method:** In order to find the research that I needed I searched EBSCOhost with key words and Boolean operators such as: Longevity and aging, longevity and culture, longevity and quality of life, longevity and lifestyle. I found seven articles exploring the key factors to living an exceptionally long life.

**Results:** While living a healthy lifestyle is important and can help one to age “gracefully” it is not the driving factor that contributes to an exceptionally long life. Genetics is the single most influential factor in aging well.

**Conclusions:** There is a link between genetics and aging and research has identified many genes that contribute to longevity. In the field of genetics there are multitudes of research yet, they have not found why some genes help an individual to reach old age and other genes do not seem to help until old age. The contribution of genetics to longevity cannot be ignored.

**Implications for nursing:** The number of people living to 100 years or older is growing, as nurses we must be ready to take care of an older population. As the population ages we will need to be proficient at helping the elderly manage chronic illnesses. Gerontology is an emerging field of practice and as the population ages it would behoove all nurses to be educated in the care of the elderly.
## Improving Sleep Quality in the Elderly using Adjunct Therapies

Sondra Howard  
Southern Arkansas University - Magnolia

**Significance:** The elderly tendency to have poor sleep quality has put them at risk of being depressed and thus, lacking a quality life. Although much of the elderly population uses benzodiazepines and nonbenzodiazepines, the adverse effects of each may cancel out what good the improved sleep has attempted to give them. It would be beneficial to seek out adjunct therapies that can help with their sleep wake cycle, such as melatonin therapy, exercise, and music therapy.

**Purpose (or Problem):** Although benzodiazepines and nonbenzodiazepines help the elderly fall asleep, research shows that it does not keep them asleep or allows them to feel rested when they wake up in the morning.

**PICO Format Question:** Will adding melatonin, exercise other therapies such as music therapy, help the elderly stay asleep during the night? Is melatonin sufficient enough by itself as a primary therapy for sleep quality in the elderly?

**Search Strategy and Quality Screening:** Using the CINAHL and Science Direct website via the Magale Library at Southern Arkansas University, a search was made using melatonin therapy in the elderly and sleep quality in the elderly, music therapy.

**Evidence:** Peer reviewed research articles.

**Synthesis of Evidence:** Evidence showed that melatonin has beneficial effects on the sleep quality of the elderly. It helps to keep the patient asleep during the night and feel rested in the morning. Exercise has the same effect. Although music therapy can help the patient relax, there is currently not enough evidence to indicate that it can help the patient’s sleep quality.

**Conclusions and Recommendations:** Adding melatonin and exercise as adjunct therapy to the elderly with poor sleep quality can improve their time that they are asleep and their feeling of rest.

**Implications for Nursing Practice:** Melatonin may be too strong to administer while on benzodiazepine or nonbenzodiazapine therapy. It can be used as an alternative to this therapy. However, exercise and music therapy can both be used as an adjunct therapy to either one.
**Health Benefits of Volunteering Among Older Adults**

Sun Young Lee  
Southern Arkansas University

### Significance:
There is an increase in aging population and people living with chronic conditions. With the aging process, older adults experience a decline in functional and cognitive abilities. The loss of physical health and social roles are associated with depression and decreased life satisfaction in older adults. Volunteering, on the other hand, can provide opportunities for older adults to engage in social and physical activities to enhance their well-beings. If volunteering results in health benefits particularly on older adults, it would be important to see how volunteering can be used as means to help elders pursue healthy lifestyles.

### Purpose (or Problem):
Older adults experience degeneration in health as well as decline in functional and cognitive abilities. In addition, retirement leads to a loss of social roles in older adults. The purpose of this study is to synthesize existing studies regarding health benefits of volunteering on older adults.

### PICO Format Question:
What are the positive health benefits to those who engage in volunteering activities?

### Search Strategy and Quality Screening:
The research articles were obtained through EBSCO host search engine using key terms “volunteer,” “older adults,” “health benefits,” and “well-being.” Also, ancestry approach was used to find an article that was included in a systematic research study. Research articles on the benefits of volunteering on different age groups, gender, and in different countries were included to examine different effects on diverse groups of people. Only papers in English language with full texts were considered. Articles were included in this study if they studied the relationship between volunteering work, including non-paid work, and its effects on people’s overall well-being.

### Evidence:
There are a total of nine studies which met the inclusion criteria. Research articles dating back to 2005 were included in this study due to the lack of resources and researches performed over this area. This paper presents a systematic review of the evidence of volunteering on older adults’ overall well-being.

### Synthesis of Evidence:
After extensive review, common themes found among the articles were higher life satisfaction, self-esteem, better physical and psychological health, and enhanced social life among volunteers than non-volunteers. The studies supported that volunteering has positive benefits on physical and mental well-being as well as on social life. Studies reported that volunteers have a higher level of physical health than non-volunteers. Compared with non-volunteers, more volunteers met recommended physical activity levels and reported better night’s sleep. Overall, evidence show that volunteers had higher self-esteem, decreased psychological distress and higher life-satisfaction than non-volunteers.

### Conclusions and Recommendations:
We recommend further research to determine whether volunteering can be used as a method to keep the geriatric population healthy through longitudinal studies.

### Implications for Nursing Practice:
Volunteering and its benefits on physical health, mental well-being, and increased social roles are strongly correlated. Nurses play vital roles in teaching patients. In the nursing discipline, nurses may introduce older adults to participate in volunteer activities as a way to promote healthy lifestyles based on these results.
Abstract #: 110

**Elder Abuse**

Taylor Dodson NS, SAU
Southern Arkansas University College of Nursing BSN

**Significance:** Abuse of elder adults is more well-known than child abuse, but is present in society in astonishingly high numbers. Elder abuse happens to 2-10% of the over 65 population (Harris, 2006). It is the role of the nurse to recognize signs of elder abuse, report it, and try to prevent it in an effort to reduce the amount of elderly adults suffering. Knowing how to recognize signs of elder abuse and knowing what to do about it are the most important parts of caring for an abused elder. By knowing the proper statistics, the people who are at risk, the signs of elder abuse and how to prevent, as is presented in the following articles, a nurse has the power to better an elder’s life and stop abuse as quickly as possible.

**Problem (or Purpose):** Many elderly people are being abused in a number of ways, the main complaints are physical, psychological, financial, sexual, and neglect. Unfortunately it can be very difficult to find caregivers whom you can trust to care for an elderly patient. The abuse is not only be from caregivers, but also family members. It is the healthcare team’s responsibility be an advocate for the abused and protect them.

**PICO Format Question:** Are actions of a caregiver understandable yet still inappropriate? Was the patient lashing out at the caregiver? Who is Vulnerable? How Can Medical Professionals Prevent Elder Abuse?

**Search Strategy and Quality Screening:** Articles pertaining to Elder Abuse were found in EBSCO Host. I searched Elder Abuse as my main topic, with subtopic searches consisting of the key words, nursing, healthcare, and advocacy. Search years had a limited range, from 2008-2013, though one article did come from 2006.

**Evidence:** The search produced many articles consisting of Elder Abuse though the data within many articles were not relevant to the aim of my paper. Elder Abuse is important topic to cover and is very common throughout healthcare, resulting in data saturation from several reports produced.

**Synthesis of Evidence:** Five types of abuse can happen to elders by caregivers: physical, psychological, financial, sexual, and neglect. Psychological, physical abuse and neglect are the most common of the five, with percentages varying in multiple studies (Harris, 2006; Sturdy, 2012; Gray-Vickery, 2004). Elder abuse “can be considered as a single or repeated act of lack of appropriate action occurring within any relationship where there is an expectation of trust, which causes harm or distress to an older person,” (Harris, 2006). The best way to determine abuse is to actually ask the elderly person but to also ask the caregiver as well (Harris, 2006). While 30% of nursing homes in the United States between 1999 and 2001 were cited for elder abuse, most abuse takes place in the victim’s home (Gray-Vickery, 2004). A nurses’ duty to care can override comfort and patient confidentiality and a nurse has a moral and professional responsibility to report any suspected abuse. By facing the fact that elder abuse does happen, more cases can be prevented because of societal awareness. Knowing the signs of elder abuse can stop abuse from further occurring and punish those who have committed crimes.

**Conclusions and Recommendations:** Elder abuse happens to 2-10% of the over 65 population and often in the home. Nurses and other health care professionals as well as family members should be aware of signs of abuse and report concerns to Adult Protective Services. Knowing your moral standing and making sure abuse is actually happening to a patient before you report it is key to successfully identifying abusers and bringing justice to those who is dignity and trust have been damaged.

**Implications for Nursing:** Nurses should think about their own personal values and ethics and what they define as elder abuse so they can identify when an action is actually abusive so there will be no ambiguities. A nurse must first determine where they stand morally on what constitutes abuse and appropriate behavior before determining whether abuse is actually present in a case. Getting confirmation from the patient is necessary if the patient is mentally able to identify their abuse (i.e. people with Alzheimer’s disease have a hard time remembering if abuse has occurred) and some gentle persistence may be needed (Harris, 2006).
# Abstract

**Abstract #: 111**

**Impact of Military Life and the Elderly Veterans of War**

Tiffany Slack  
Southern Arkansas University college of Nursing

**Significance:** There is a large population of war veterans in our society. Studying the long-term mental effects of war and how they affect the mental health of these soldiers is very important. Mental health for young veterans has come a long way in the recent years following the wars in Iraq; however, for the veterans of earlier wars, such as Vietnam, there was not accessible help to treat the mental scars of battle. The quality of life for this population of people is quietly suffering. The importance of this study was to review the statistics of the survivors of war and revise the intervention implemented for them.

**Problem (or Purpose):** With veterans over 65 years old there were not ample resources upon returning home from war to be screened for mental illness. Therefore, the problem in many clients has been unresolved for many years. Overtime, illnesses such as Post-traumatic Stress Disorder and Depression have lowered their overall quality of life. Some instances even lead to suicide. The problem seems to be that these wars are over for a vast majority of the population, yet for the ones that were there, the mental wounds are still present.

**PICO Format Question:** Are war veterans 65 years or older with mental illness currently receiving adequate interventions?

**Search Strategy and Quality Screening:** The five quantitative research articles used discuss mental illness within the geriatric veteran population they were found on the Science Direct Database. The keywords used were "veterans", "elderly "and "mental illness" with assist from the Boolean operator "AND." Search years were limited: 2007-2013. Studies were limited to veterans over 65 years of age.

**Evidence:** In a study in Australia assessing Korean war veterans for PTSD and depression included 6,122 ranging from age 66-99 years. Anxiety disorders resulting from depression was discussed in a study of 226 Taiwan veterans from the Chinese Civil War. Another study used a sample population of 5,222 veterans of the United States of America, 387 were over the age of 65. This study discusses the use of assertive community treatment for veterans, and mainly, Mental Health Intensive Case Management in VA facilities. A sample population was made of 745 randomly selected veterans from four different Veteran Affairs Centers. This study contained three age groups, 18 to 44, 45 to 64 and 65 and older. The research focused on psychiatric illness between the age groups.

**Synthesis of Evidence:** After analyzing research articles it is apparent that there is a significant problem with mental illness within the elderly veterans. The research provided shows that if this population is assessed and treated the success rates of elderly veterans are very high. The evidence also showed a strong relationship between mental illness in veterans and suicide.

**Conclusions and Recommendations:** Elderly veterans still need to be assessed for mental illness and proper treatment implemented. The success rates for treatment are high. It is the responsibility of the health care providers to assess these clients and inform them and their families about the resources offered exclusively for them. Overlooking mental illness for so many years can have a devastating ending.

**Implications for Nursing Practice:** Mental health screens should be done routinely for the elderly veterans. Informing the clients and their families of resources provided to them from the Veteran Affairs hospital should be included in client education. Encouraging veterans to accept help is vital in successful treatment.
Abstract #: 112

Evaluating the Effectiveness of Katz-Index of Independence in Activities of Daily Living

Todd Marchan, NS, SAU
Southern Arkansas University College of Nursing

Significance: Geriatric individuals decline functionally and cognitively as they age. It has been researched that this is a normal finding with the elderly. As health care professionals, how are we supposed to figure out if a geriatric patient cannot perform daily activities to survive, such as feeding oneself? A tool that is used to assess activities of daily living in the geriatric population is the Katz Index.

Problem (or Purpose): “The Katz ADL is a valuable comprehensive assessment scale that predicts future decline or improvement in health status” (p. 205). However, the problem is that there is little evidence that exists for reliability or validity testing of the Katz ADL. In recent years, articles in the nursing literature have evaluated the effectiveness of the Katz ADL (Hartigan 2007; de Rooij & Govers 2008; Reijneveld & Spijker 2007; Martinez & Cabrero-Garcia 2008; Hermodsson & Ekdahl 1999). The premise of the review of the literature is to evaluate the effectiveness of the Cognitive Impairment Assessment tool, Katz-Index of Independence in Activities of Daily Living.

PICO Format Question: Among the general population, does the Katz Index need to be implemented more in care to determine if one can survive? Does it really show the effectiveness of ADL’s?

Search Strategy and Quality Screening: Articles on evaluating the effectiveness of the Katz Index were found through Science Direct, PsycInfo, and EBSCOhost databases. Similarities and differences were made upon reviewing and evaluating these articles. Search terms used to locate appropriate literature were Katz Index, Geriatric population, and effectiveness. Search years were limited: 2007-2013 and other articles that were not in that time frame, were prevalent to the study.

Evidence: The search produced was limited because there was not that much information regarding this topic.

Synthesis of Evidence: The focus was to investigate long-term cognitive, functional, and quality-of-life outcomes in very elderly survivors at least 1 year after planned or unplanned surgery or medical intensive care treatment. The Katz Index assessment tool was used to understand the underlying problems of patients who had trouble performing their ADL’s. According to de Rooij, the Katz Index was effective in evaluating patients before and after surgery (Rooij, Govers, Korevaar, Giesbers, Levi, de Jonge, 2008). Hartigan (2007) wrote a comparative review of the Katz ADL and the Barthel Index in assessing the activities of daily living of the older population. “Nurses should be familiar with the strengths, weaknesses and precision of assessment scales to understand how best to use the scale as adjunct to clinical practice” (Hartigan, 2007). A structured review compared the Spanish versions of the Barthel Index and the Katz Index of ADL. They came to the conclusion that new, better endowed instruments need to be developed and adapted (Cabanero-Martinez, Garcia, Richart-Martinez, and Mendoza, 2008). A quantitative analysis was used to examine the reliability and validity of self-reported limitations encountered in the activities of daily living (ADL) for Turkish, Moroccan, and indigenous Dutch elderly in the Netherlands. In the study, the Katz Index was evaluated and proven to be effective (Reijneveld, Spijker, and Dijkshoorn, 2007). A quantitative analysis was used to investigate whether the Swedish version of the Katz Index of ADL (Activities of Daily Living), on days 5-7 after amputation for vascular disease. All in all, this study was useful in identifying those who will survive the first month postoperatively and those who will be able to return to their homes (Hermodsson and Ekdahl, 1999).

Conclusions and Recommendations: The outcomes that I discovered while doing this literature review were very beneficial for evidenced-based practice. Data shows that the current state of the effectiveness of the Katz Index is not great. Therefore, it is recommended that more research experiments need to be done so we can have current data on the effectiveness of the Katz Index.

Implications for Nursing Practice: In today’s society, nurses need the most current evidence-based practice about the Katz Index of ADL’s.
# Factors Contributing to Women’s Decision for and Their Experiences with Home Birth

| Brooke Boyd, Daniela Gonzalez, Jocelyn Ashley, and Jessica Wells |
| University of Arkansas in Monticello, School of Nursing BSN Program |

## Background
For centuries, women have been deciding on where to give birth based on previous knowledge and experiences gained throughout their lives.

## Purpose
The purpose of this study was to gain more insight as to why women in the 21st century choose to have home births and exploring the rationales for their decisions.

## PICO Format Questions
What are factors contributing to women delivering and their experiences with home birth?

## Search Strategy and Quality Screening
We searched CINAHL using the search term home birth resulting in 195 articles. After refining to the past 10 years and searching the term prepare for childbirth, 131 were found. We then search through PubMed for planned home births under research articles, 6 articles were found. After analyzing abstracts, 12 of the most relevant articles to our topic were used.

## Synthesis of Evidence
After collecting data from our 12 articles, we found a common theme. Four of them explained how women chose home birth and wanted to experience giving birth in an active and full way. Three articles explained that women in the hospital setting felt they had a lack of control over their birthing experience. In the remaining articles, women expressed having positive feelings and experiences with home birth.

## Conclusion and Recommendations
It was found that during their home births, women shared common feelings towards wanting a more traditional birth setting, more control during their delivery, and having positive feelings about their experiences.

Implication for Nursing: Nurses can reassure low-risk women of their option to choose home birth if desired. This can ensure that the mother to be is in her choice of setting and she can feel comfortable and in control.
# Pain and Dementia: An Analysis of Effective Pain Management in Elderly Patients with Decreased Cognitive Function

BJ Kidwell, LaQuinton Peterson, and Justin Calomese  
University of Arkansas at Monticello BSN Nursing Program

**Significance**: Effective pain management is key to preventing progression of dementia and social dysfunction.

**Problem**: Because of the inability to communicate pain level, patients with dementia can have a progressive decrease in cognitive function and an increase in anxiety and depression.

**PICO Format Question**: How effective are the current pharmacological and non-pharmacological treatments at decreasing pain levels and preventing the progression of cognitive dysfunction in patients with dementia?

**Search Strategy and Quality Screening**: Using the CINAHL databases, we used the following search terms: Alzheimer’s, Pain, Pain Assessment in Dementia. The search years were 2009-2014.

**Evidence**: The search initially yielded 13 studies of either pain assessment or dementia, pain, or decreased cognitive function in elderly patients. This was then decreased to seven articles.  
Synthesis of Evidence: The searched articles indicated that under diagnosis of pain is common in patients in LTC facilities. The articles examined also indicated that the (MOBID II) scale may be more effective than standard assessment of pain in the elderly.

**Conclusions and Recommendations**: MIBIB II may be more effective than standard care practices. It is recommended that further investigation be done to find more effective practices.  
Implications for Nursing Practice: It is imperative to consider that the traditional managements and reporting of pain such as observation, or self-report may not be feasible with patients with dementia. Using MOBID II may be more effective holistically in treating patients with dementia.
### Comparison of Tools in Assessing Cancer-Related Fatigue

Jessica Bryant  
University of Arkansas at Monticello BSN Nursing Program

#### Significance:
Cancer-related fatigue (CRF) is the most common complaint of cancer patients, reported by 90% of patients with cancer. In an effort to improve quality of life (QOL) and functional status in adult male and female patients with cancer, it is important to accurately assess CRF.

#### Problem (or Purpose):
The purpose of this project was to identify which tools are most efficient in assessing CRF adults.

#### PICO Format Question:
In adult male and female patients with cancer, which assessment tool is best for assessing CRF?

#### Search Strategy and Quality Screening:
We used CINAHL, MEDLINE, and PubMed databases using search terms fatigue, cancer, and assessment with the Boolean operator AND limiting to 2009-2014 and academic nursing research journals, male and female adults in all stages of cancer, yielding 3,159 studies. Adding the search term cancer decreased the articles to 609 and limiting to full text, only nursing journals within the last five years left 47. Articles were quality critiqued.

#### Evidence:
The sample included five studies.

#### Synthesis of Evidence:
The Piper Fatigue Scale (PFS), Brief Fatigue Inventory (BFI) and other tools were used to assess CRF. The PFS was the most common tool used with a reliability of 0.83-0.99 in all five studies. In one study, the PFS had a Cronbach alpha of 0.86-0.96 and an alpha of 0.97 on the BFI. From the study findings PFS, PSQI, and GSDS were correlated, providing evidence of reliability and validity.

#### Conclusions and Recommendations:
Although more research is needed the PFS appears to be best in identifying CRF in adult patients with cancer. Assessing CRF may lead to nursing interventions that improve QOL and functional status in adult cancer patients.

Implications for Nursing Practice: Incorporating the PFS in clinical may help nurses to identify CRF and promote early interventions to relieve fatigue in adult cancer patients.
**Assessing Family Preferences for Participating the Care of the Hospitalized Older Adults**

Haley Camp  
Southern Arkansas University- Nursing School

**Significance:** Family involvement in the care of hospitalized older adults is important for the health of older adult patients. Studies suggest that family involvement with care of the patient during hospitalization is associated with higher patient and family satisfaction.

**Problem:** Family participation in the care of hospitalized older adults is a largely uninvestigated study (Deborah A Roosenbloom- Brunton, 2010). Often nursing researchers are interested in focusing on caregiver role strain and the effect on emotional or physical health status of the caregiver participating in the care of the elderly at home. The primary care giver in this scenario is the dependent of the older adult. Generally speaking, when a patient is hospitalized care is mostly entrusted to the health care providers and nursing staff involved with the patient. When the elderly are hospitalized and are dependent in one or more areas of ADLs, sometimes it is difficult for the nurses to compensate for all patients due to lack of enough nursing staff on shift.

**PICO Format Questions:** Do family preferences for participating in the care of a hospitalized older adult correlate with nursing staff and caregiver collaboration?

**Search Strategy and Quality Screening:** A search was made on EBSCO by using specific terms, *family participation, hospitalized older adults*, and *caregivers* on the Boolean operator. The search was limited to years 1990-2012. It was difficult to find several journals specific to this topic so screening was difficult. Information was taken from different aspects of the caregiver role for an inpatient older adult.

**Evidence:** A total of five studies were viewed for appraisal.

**Synthesis of Evidence:** The articles that were examined suggested a common theme: nurses and health care providers can increase the satisfaction and number of family caregivers in the hospital. These researchers saw the gap in the literature about relative's collaboration with nurses and sent out questionnaires to explore the connections between the two variables. Analysis found that relatives who had influence on decisions, high quality of contact with nurses, established trust with the nurse, received information about care, and were allowed an influence on discharge planning resulted in high satisfaction of the hospital care trajectory phases (T. Lindhart, 2008). Help in the care of the patient was supplied by ninety-five percent of participants and forty percent of those participants helped every day (T. Lindhart, 2008). Overall, nurses and other health care providers can promote family participation of care in the older hospitalized adult and in turn increase family and patient satisfaction.

**Conclusions and Recommendations:** Not every relative has the time to spend at the hospital participating in the care of the elderly patient but often they feel a sense of responsibility and need to be collaborated with regarding patient care decisions. Contacting the family over the telephone is a good way to stay connected with caregivers who cannot be physically present to give care. Encouraging the family to call for updates on their loved ones status and for any questions regarding the care of the patient is an exceptional way to get the family feeling involved. Guilt and powerlessness can be a result of relatives that do not have participation in the care of the decisions of the elderly adult; low satisfaction of patient care was found when the relative was left out of the care and decisions (T. Lindhart, 2008). Collaboration with the nurses can help educate the patient about what they can do to gain a sense of control over assistance in helping the elderly patient reach better health even when they are not able to be present at the hospital.

**Implications for Nursing Practice:** Family of the patient can be a valuable resource to the nurse giving care. Members of the family are able to assist the nurse in providing adequate care that is individualized toward the patient’s needs. By enhancing communication skills, collaborating with the patient's family and providing education to the family of the elderly adult patient, nurses and health care providers can increase the satisfaction and number of family caregivers in the hospital, thus helping increase the patient goal of overall health.
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<tr>
<th><strong>Cultural Influences Regarding Immunizations of Older Adults</strong></th>
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| **Ashely Jaggers**  
**Southern Arkansas University** |

**Background:** Immunizations can be a barrier of protection for older adult patients. Some research suggests that cultural competency plays a major role in compliance with annual immunizations. Linn, Guralnik, and Patel (2010) stated, “Racial and ethnic minorities habitually receive the vaccine at lower rates than whites, a phenomenon that poses profound immediate and long-term consequences as the nation evolves an increasingly heterogeneous demographic profile.”

**Purpose:** To study, evaluate, and educate the cultural influence of immunizations on older adults.

**Method:** There were six cases studied, among different cultures. All were interviews for information about the education level of immunizations among older adults, as well as, the evaluation of up to date immunizations among older adults.

**Results:** There is significant need for evaluation and education among older adults in all cultures studied about proper immunizations.

**Conclusions:** Older adults must be educated about the need for proper immunization. Without proper education, not only will their generation be affected, but future generations will inherit the same ignorance.

**Implications for Nursing:** The research identified a growing need for culturally competent and aware nurses in health care to raise compliance with immunizations among older adult patients.
The Impact of the OIF/OEF Wars on the Children of Our Deployed Military Personnel

Amber Marts BSN, RN
UAMS Primary Mental Health Nurse Practitioner Program Class of 2014

**Significance:** With children it is often difficult for them to communicate what stressors are having an impact on their mental health, if practitioners are more aware of the impact that deployment can have on children with a parent in the National Guard or active duty military on the mental health of that child, the treatment and diagnosis can be done quicker. This also gives the family quicker assistance in their time of need and support.

**Purpose (or Problem):** In mental health, professionals are seeing more and more families with children coming in with mental health issues while a parent has been deployed. The children are presenting with more suicidal ideation, aggression, and depressive symptoms. The thought that this might be occurring to a lot of children considering the sheer number of children who have a parent deployed to a war zone was important to the providers of care for these children. It was also important to determine if there was a standard of care for these children.

**PICO Format Question:** In children of deployed military personnel, is there an increase in mental health issues when a parent is deployed to a war zone?

**Search Strategy and Quality Screening:** The research strategy used in this literature review utilized Google Scholar, EBSCO, Ovid, and PubMed. The search terms used to locate appropriate information for this study were *mental health, children, deployed parents, military, services.* The search years were limited from 2008-2014 and some limiting factors were limiting to research report. Quality checks involved determining if the study was a randomized controlled trial, meta-analysis, and systematic reviews.

**Evidence:** Initial searches returned 2251 total studies, but that number was reduced by eliminating research that was not a RCT, meta-analysis, or systematic review. Further by using the parameters set in search terms the research was cut back to include 13 articles.

**Synthesis of Evidence:** The articles that were examined show that children have an increased risk of having a mental health problem present. The time frame in which these problems can occur is not limited to during deployment, it can also occur pre-deployment and post-deployment. Mental health of the entire family is also a concern, because the parent left to take on the duties of the deployed parent can affect the mental health of the parent and the family. Parents that are distressed are more likely to view their children as distressed as well. Children may present with a decline in function or regression at school and home. Symptoms of anxiety are also a common presentation as well as aggression and irritability. These symptoms are shown to get worse as deployment time increases. Symptoms of childhood traumatic grief may also appear in many children who lose a parent to war.

**Conclusions and Recommendations:** Children who experience the deployment of a parent to the OIF/OEF war experience many new mental health issues and further studies need to be conducted to identify the most evidence based treatment for these children. It is also important that further research be done on feasibility of treatment that can coincide with the other family members or the returning parent.

**Implications for Nursing Practice:** All nurses should assess the families of deployed troops for distress and mental health problems. Referrals to effective resources are paramount in the care of these families. Provide families with reassurance and empathy.
# Using the Transitional Care Model for Improving Geriatric Patient Care

Melissa Tridico  
Southern Arkansas University College of Nursing

<table>
<thead>
<tr>
<th><strong>Background:</strong></th>
<th>Essentially the entire scope of research presented through these articles points to TCM as an effective means to implement a higher quality of care, greater patient satisfaction, and ease of transition for the geriatric patient population from the hospital to home.</th>
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<tbody>
<tr>
<td><strong>Purpose:</strong></td>
<td>The purpose of this study is to determine how the transitional care model can be effectively introduced and implemented into healthcare facilities and if it is an important factor in ensuring health care continuity and avoiding preventable poor outcomes among the geriatric patient population.</td>
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<td><strong>Method:</strong></td>
<td>For the geriatric population, the transition from hospital care back home can be particularly difficult and filled with a series of complex needs that can be left unaddressed throughout the process of discharge. The current gaps in this process are beginning to be addressed through following standard protocol termed, the Transitional Care Model (TCM), in which transitional outcomes for patients are improving. With preventable poor outcomes and rehospitalizations among older adults on the rise, some researchers suggest that it is becoming increasingly critical for the implementation of a rigorously tested and evidence-based TCM for hospital discharge screening.</td>
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<tr>
<td><strong>Results and conclusions:</strong></td>
<td>Its effectiveness to decrease the length of stay for patients with the model protocol. These six articles express the benefits of a transitional care model in aiding patients on the road to healing. They also assessed a wide variety of factors affected by TCM and the reasons for implementing differing transitional models for positive patient outcomes. It continues to be evident in the research that a hospital staff and the organization itself must remain in tandem with the plans to implement a TCM for it to become an effective protocol. The implementation will then seek to increase the ease of transitioning patients from the hospital to home. In addition, effective assessment and review of the TCM after its implementation aids in the process of determining its effectiveness and continued success.</td>
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<tr>
<td><strong>Nursing Implications:</strong></td>
<td>Effective assessment and review of the TCM after its implementation aids in the process of determining its effectiveness and continued success. Effective means to implement a higher quality of care, greater patient satisfaction, and ease of transition for the geriatric patient population from the hospital to home.</td>
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Factors Effecting Parental Refusal or Delay of Childhood Immunizations

Justin Starr, Charlie Carr, C.J. Morgan, Tara Crim
University of Arkansas at Monticello

**Significance:** Many factors make parents hesitant about immunizing their child or delaying the schedule due to personal fears/attitudes.

**Purpose:** To determine factors affecting parental decisions to refuse or deviate from the recommended childhood immunization schedule.

**PICO Format Question:** What factors affect parental decisions to immunize their children?

**Search Strategy/Quality Screening:** We used CINAHL and PUBMED to search the terms immunization safety, parental hesitancy, and vaccine refusal/delay. A search of Google using the search terms “qualitative” and “parents refusing vaccinations” yielded an additional three research reports. Our search years were limited to 2009-2014.

**Evidence:** Abstracts were selected and reviewed resulting in eight research reports. The final eight articles were reviewed for the highest quality of data and placed into an evidence table.

**Synthesis of Evidence:** We assumed religion would influence parental decisions regarding vaccines, but other variables were more prevalent. Surveys found the major concern was immunizations caused autism. Parents believed vaccines will overload the child’s immune system. Hispanics were more likely to believe vaccines caused autism compared to Caucasians and African Americans, and African Americans were more likely to have never had vaccines. Parents uneducated about vaccine/effects they may have were less likely to immunize their child. Negative experiences made them more apt to refuse immunizations.

**Conclusions/Recommendations:** We found fears about immunization effects, ethnicity, and lack of education and negative experiences were major factors affecting a parent’s refusal/delay of immunizations.

**Nursing Implications:** Education provided may alter feelings/attitudes of the parents bringing their child to be immunized.
Evidence for Causes and Prevention of Medication Errors Caused by Nursing Staff in the Hospital

Danielle Leonard, Jessica Pack, Chelsea Cone, and Cindy Cameron
University of Arkansas at Monticello BSN Program

**Significance:** Every year medication errors is one of the leading causes of accidents in the hospital, placing the patients at high risk for injury.

**Purpose** Events that can contribute to the incidence of medication errors are failure of the nurse to check the monitor the medication rights.

**PICO Format Question:** What factors affect nursing medication errors and what interventions can be used to decrease the medication error rate?

**Search Strategy and Quality Screening:** The literature research process used CINAHL, EBSCO, and PubMed. Search terms included *causes of medication errors, medication errors, and nursing research.* Search years were limited to the last five years. We included articles that discussed nurses in the hospital, distraction, preventions, technology uses, and had at least one nurse author.

**Evidence:** The search produced a total of 5,653 studies. Exclusion criteria included drug overdose, home health visits, and hospice. We used nine articles for this study.

**Synthesis of Evidence:** Data indicated that the frequency of preventable errors was decreased by implementation of technology into the medication administration process. Nurses in the studies noticed a large decrease in the frequency of medication errors is due to increased usage of technology.

**Conclusions and Recommendations:** Medication errors have various causes and can be prevented using technology, a supportive environment, decreasing extended work hours, continuing education, and reporting errors as they occur.

**Implications for Nursing Practice:** Regular and adequate pharmacology education for nurses, use of the BCMA and eMAR, and creation of a favorable working environment that minimizes distractions may decrease the rate of medication errors.