**New Understandings Generated by the Evidence**

Analysis of the articles revealed critically ill patients are at an increased risk for pressure ulcers increasing patients' morbidity and mortality. While the information presented in this evidence based research project does not relate specifically to sacral Mepilex in the ICU population, it does provide valuable information to reiterate the importance of knowledge of protecting skin integrity in the hospital population. The articles reviewed discuss patients in the ICU being at an increased risk of pressure ulcer development due to their compromised health status. Having an understanding of the factors increasing the likelihood of pressure ulcer development allows the nurse to focus on and implement nursing cares on these high-risk patients. Evidence from the review of these articles includes the following:

* Lab values such as low albumin and prealbumin (Shahin, Dassen, & Halfens, 2009), low lymphocytes, decreased hemoglobin, along with high blood glucose levels and C-reactive proteins were associated with an increased risk of pressure ulcer development (Alderden et al., 2011, p. 37).
* Most pressure ulcers studied are stage II (45%) and more likely to be healed by discharge than any other stage of pressure ulcer studied (Alderden et al., 2011 p. 37).
* Pressure ulcers are most likely to develop on bony prominences including the sacrum, heel, and ischium (Alderden et al., 2011, p. 39; Shahin, Dassen, & Halfens, 2009, p. 418).
* Fifty-five percent of pressure ulcers in the ICU develop within two weeks of admission (Shahin, Dassen, & Halfens, 2009, p. 419).
* Patients requiring vasopressor therapy were five times as likely for development of unhealed pressure ulcers (Alderden et al., 2011, p. 37).
* Patients with a spinal cord injury are 15 times as likely to develop unhealed pressure ulcers while those over 40 years of age were seven times more likely to develop unhealed pressure ulcers (Alderden et al., 2011, p. 37).
* Zero out of 41patients with sacral Mepilex applied developed pressure ulcers indicating these dressings may be beneficial in aiding in the prevention of pressure ulcer development (Brindle, 2010, p. 4).
* Hydrocolloid dressings are more effective at healing pressure ulcers than standard dressings (Shahin, Dassen, & Halfens, 2009, p. 419).
* Pressure ulcers are the third most expensive disorder behind cancer and cardiovascular disease (Shahin, Dassen, & Halfens, 2009, p. 414) costing up to “$70,00 per wound” (Courtney, Ruppman, & Cooper, 2006, p. 1).
* The dressing Urgotul Flex may reduce wound surface area, with a mean reduction of 78.2% for acute wounds and 41.9% for chronic wounds over a four week period (Meaume et al., 2011, p. 184)
* “No product could ever replace bedside nursing care” (Brindle, 2010, p. 7).

The evidence presented above identifies nursing practices must remain the mainstay for pressure ulcer prevention in the ICU. Nursing must continue to be aware of the risk factors related to pressure ulcer development as well as methods to prevent and/or treat these wounds. Overall, the focus must remain on pressure ulcer prevention in these highly compromised patients.

Throughout the critical analysis of the literature, similar factors and assessment findings noted risk in the intensive care patient for the development of pressure ulcers. Popular measurement tools were utilized, such as the Braden Scale for skin assessment, photos, and a visual analog scale to determine pain. Pressure ulcers appear preventable through the use of appropriate nursing interventions. Products studied were noted to prevent or lessen the severity of pressure ulcers during hospital stays or during home/clinic dressing changes.

For the purpose of this evidence-based project, Levine’s Conservation Model identifies the importance of the “wholeness of the individual” (Alligood & Tomey, 2010, p. 299). This theoretical model was used to explain the nurse’s role in prevention and treatment of pressure ulcers. A focus of Levine’s Conservational Model, “conservation of structural integrity” (Alligood & Tomey, 2010, p. 229) relates to this research based study. Nurses that follow Levine’s Model develop strategies to maintain or re-establish the patient’s skin integrity. Strategies to decrease the incidence of pressure ulcer formation included thorough skin assessment on admission and continuously monitoring for risk factors. Nursing can implement appropriate early preventative skin care measures after using measurement tools that identify risk level for skin breakdown.