**appendix a: Literature Evaluation Table**

**Change Topic: PICOT question**

(P) Can a multifaceted evidence-based educational intervention (I) that is linked to treatment and prevention of pressure ulcers in comparison to the absence of formal education (C) result in enhancing the confidence and knowledge of rural setting nurses in caring for patients that have pressure ulcers or are at risk of acquiring Pus within 3 months (T)

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| **Criteria** | **Article 1** | **Article 2** | **Article 3** | **Article 4** |
| **Author, Journal**  **(Peer-Reviewed)** | Porter‐Armstrong, A. P., Moore, Z. E., Bradbury, I., & McDonough, S.  *Cochrane Database of Systematic Reviews*  <https://doi.org/10.1002/14651858.CD011620.pub2> | Hommel, A., Gunningberg, L., Idvall, E., & Bååth, C.  .  *Journal of Clinical nursing*  <https://doi.org/10.1111/jocn.13465> | Gunningberg, L., Sedin, I. M., Andersson, S., & Pingel, R.  *International journal of nursing studies*, | Baron, M. V., Reuter, C. P., Burgos, M. S., Cavalli, V., Brandenburg, C., & Krug, S. B. F.  *Revista latino-americana de enfermagem*  <https://doi.org/10.1590/1518-8345.1134.2831> |
| **Article Title and**  **Year Published** | Education of healthcare professionals for preventing pressure ulcers  (2018) | Successful factors to prevent pressure ulcers–an interview study  (2017) | Pressure mapping to prevent pressure ulcers in a hospital setting: A pragmatic randomised controlled trial.  (2017). | Experimental study with nursing staff related to the knowledge about pressure ulcers  (2016) |
| **Research Questions (Qualitative)/**  **Hypothesis (Quantitative),**  **and Purposes/Aim of Study** | Can education of healthcare professionals prevent pressure ulcers  To determine whether education of healthcare professionals can prevent pressure ulcers | What are the successful factors to prevent pressure ulcers in hospital setting?  To explore successful factors to prevent pressure ulcers in hospital settings. | Can Pressure mapping prevent pressure ulcers in a hospital setting?  To evaluate the effect of a pressure mapping system on pressure ulcer prevalence and incidence in a hospital setting. | To compare the scores of knowledge in teams participating or not participating in educational interventions about pressure ulcers. |
| **Design (Type of Quantitative, or**  **Type of Qualitative)** | Systematic qualitative review  Randomized controlled trials (RCTs) and cluster‐RCTs  Non‐randomized controlled trials (NRCTs), controlled before‐after (CBA) studies and interrupted‐time‐series (ITS) studies | Qualitative semistructured interviews were conducted   Individual interviews and focus groups | Pragmatic randomized controlled trial. | Quantitative study with experimental design |
| **Setting/Sample** | Hospital and nursing home  Staff caring for patients at risk of pressure ulcers | Six hospitals | Geriatric/internal medical ward.  n=190 | Intensive care units  n=71 |
| **Methods: Intervention/**  **Instruments** | A multifaceted evidence-based educational intervention | Individual interviews and focus groups | Continuous bedside pressure mapping system | Educational interventions |
| **Analysis** | Pre‐ and post‐test assessment following intervention  Review Manager 5 | A qualitative content analysis | Quantitative analysis | Quantitative analysis |
| **Key Findings** | Change in health professionals knowledge  Change in healthcare professionals' clinical behavior  Incidence of new pressure ulcers | Successful factors :  Creating a good organization  Maintaining persistent  Awareness and realizing the benefits for patients | No beneficial effect of a pressure mapping system on pressure ulcer prevalence and incidence | Professional nurses participating in educational intervention on PU have higher knowledge scores than those who do not participate. |
| **Recommendations** | Further research due to limited evidence. | Conduction of further research on successful factors to prevent pressure ulcer | There is need to further investigate the experience of the multidisciplinary team and the patients regarding their use of the pressure mapping system | Further research |
| **Explanation of How the Article Supports EBP/Capstone Project** | Provides evidence on multiple research regarding the delivery of education to healthcare professionals to prevent pressure ulcers | The article provides information on the prevention of pressure ulcer through multiple success factors.  It advances clinical leadership, knowledge, skills and abilities for the crucial implementation of pressure ulcer prevention. | The article provides quantitative evidence that alternative interventions do not have significant impacts on pressure ulcer prevention | Informs the significance of education in prevention of PU |
| **Criteria** | **Article 5** | **Article 6** | **Article 7** | **Article 8** |
| **Author, Journal**  **(Peer-Reviewed),** | Tallier, P. C., Reineke, P. R., Asadoorian, K., Choonoo, J. G., Campo, M., & Malmgreen-Wallen, C  *Applied Nursing Research* | Karimian, M., Khalighi, E., Salimi, E., Borji, M., Tarjoman, A., & Mahmoudi, Y.  *International Journal of Risk & Safety in Medicine* | Robineau, S., Nicolas, B., Mathieu, L., Duruflé, A., Leblong, E., Fraudet, B., ... & Gallien, P.  *Journal of Tissue Viability* | Cross, C., Hindley, J., & Carey, N.  *Journal of clinical nursing* |
| **Article Title and**  **Year Published** | Perioperative registered nurses knowledge, attitudes, behaviors, and barriers regarding pressure ulcer prevention in perioperative patients  (2017). | The effect of educational intervention on the knowledge and attitude of intensive care nurses in the prevention of pressure ulcers  (2020). | Assessing the impact of a patient education programme on pressure ulcer prevention in patients with spinal cord injuries  (2019) | Evaluation of a formal care worker educational intervention on pressure ulceration in the community  (2017). |
| **Research Questions (Qualitative)/**  **Hypothesis (Quantitative),**  **and Purposes/**  **aim of Study** | Does perioperative registered nurses (RNs) knowledge, attitudes, behaviors, and barriers about pressure ulcer prevention determine if knowledge and the availability of a pressure ulcer staging tool are predictors of pressure ulcer prevention behavior? | This study aimed to determine the effect of educational intervention on nurses’ knowledge and attitude in preventing pressure ulcers. | A therapeutic educational program conducted at the chronic phase in spinal cord injured individuals has an impact. | To develop and evaluate an educational intervention for formal care workers on pressure ulceration in the community. |
| **Design (Type of**  **Quantitative, or**  **Type of**  **Qualitative)** | Cross-sectional descriptive pilot study | Experimental design  Ransom controlled trial | individual interview | Non-randomized controlled trials  Experimental design  Questionnaire and verbal feedback |
| **Setting/Sample** | Acute care hospitals  n=62 | ICU wards  n=67 | Adult patients with any spinal cord injury  n=20 | n = 250 |
| **Methods:**  **Intervention/**  **Instruments** | Nurse education/knowledge | Educational intervention | Patient education | Educational intervention |
| **Analysis** | Binary logistic regression | SPSS software version 16, and descriptive and analytical tests were performed. | Skin Management Needs Assessment Checklist (Revised SMnac) | Questionnaire evaluation |
| **Key Findings** | There is knowledge deficit regarding assessment and prevention of pressure ulcers | Educational intervention improved the knowledge and attitude of nurses in preventing pressure ulcers | Patient education has significant impact on skin management ability, with a highly significant increase in the overall score at 3 months. | Education on pressure ulcers has positive effect within community care  Reduces direct costs of care |
| **Recommendations** | Need for pressure ulcer prevention education | Conduct appropriate educational interventions to improve the knowledge and attitude. | Implementation of therapeutic educational program conducted at the chronic phase in spinal cord injured individuals | Standardized approach to education is required. |
| **Explanation of**  **How the Article Supports EBP/**  **Capstone** | Informs on the level of knowledge regarding PU prevention among nurses | Informs on the impact of educational intervention on the knowledge and attitude of intensive care nurses in the prevention of pressure ulcers | Informs on therapeutic educational program and impact on Pressure ulcer | Identifies the positive impacts of education on pressure ulceration and general community care. |