**Literature Evaluation Table**

**Student Name:**

**Summary of Clinical Issue (200-250 words):**

Hand washing is one of the basic hygiene practices. However, many individuals often ignore this simple practice. Notably, patients in long-term and acute care facilities are vulnerable to infections associated with healthcare settings and patient handling. Since the hands of the health care workers drive and promote infections among critically ill patients, hand washing remains the foundation in the infection control programs (Shobowale, Adegunle & Onyedibe, 2016). While the World Health Organization (WHO) recommends a five-moment of handwashing practice concerning patients' healthcare, many health care facilities do not comply with hands hygiene. It is noteworthy that hand washing significantly decreases the risk of infectious cross-transmissions. Even though infections related to the healthcare setting are preventable by strictly observing basic practices such as hand washing, they continue to increase mortality and morbidity in addition to the treatment costs.

Centers for Diseases Control (CDC) argues that strict adherence to hand hygiene in healthcare facilities significantly improves infection control within the facilities (CDC, 2020). The research shows that germs that causes severe infections are present in healthcare centers and that individuals within these premises including patients, visitors, and the health workers should wash their hands to reduce the risk of getting infections (Mathur, 2011). Of importance, health care practitioners should observe frequent hand washing especially just before coming into contact with a patient and immediately after any contact with the patient as a way of protecting both the patients and themselves from acquiring the infections. Good summary in the two paragraphs above.

**PICOT Question: Choose one area to evaluate… either long term care or a particular unit in the hospital setting. You are not doing research, but implementing a change process to improve outcomes. For the intervention, how do you plan to ‘enhance’ hand washing? What exactly is the intervention?**

For the patients in the long-term unit and ~~acute care facilities~~ (P), how does enhancing (what is the plan?) hand washing procedure compliance among health practitioners (I) compared to not complying with the procedure (C) reduce infections acquired in hospitals (O) ~~for the period of hospitalization (T)?~~ when evaluated monthly over 3-months (T)?

You included four (4) good study articles, two quantitative and two qualitative. The other articles are too old and do not meet the requirements for articles in this class.

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| **Criteria** | **Article 1**  **Published in 2010; not a current study article and cannot be used for papers in this class.** | **Article 2**  **Good – Quantitative Study** | **Article 3**  **Good – Quantitative Study** |
| **APA-Formatted Article Citation with Permalink** | EL-Kass, G Agarwal, N., Ashraf, S., Hussain, S., Hussain, R. & et al. (2010). Hand Hygiene in Long-Term Care Facilities A Multicenter Study of Knowledge, Attitudes, Practices, and Barriers. *Infection Control & Hospital Epidemiology*, *31*(7), 758-762. DOI: 10.1086/653821  **Permalink**:  [https://www.researchgate.net/publication/44628028 Hand Hygiene in Long-Term CareFacilities\_A\_Multicenter\_Study\_of\_Knowledge\_Attitudes\_Practices\_and\_Barriers](https://www.researchgate.net/publication/44628028%20Hand%20Hygiene%20in%20Long-Term%20CareFacilities_A_Multicenter_Study_of_Knowledge_Attitudes_Practices_and_Barriers) | Menon, V., Shukla, U., & Chavali, S. (2014). Hand hygiene compliance among healthcare workers in an accredited tertiary care hospital. *Indian Journal Of Critical Care Medicine*, *18*(10), 689-693. DOI: 10.4103/0972-5229.142179  **Permalink**:  <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4195200/> | Taghizadeh, R., Ghalebi, N., Farhoudi, F., Hoshangi Davani, M., & Sajadi, G. (2016). Impact of WHO Hand Hygiene Improvement Program Implementation: A Quasi-Experimental Trial. *Biomed Research International*, *2016*, 1-7. DOI: 10.1155/2016/7026169  **Permalink**:  <https://www.hindawi.com/journals/bmri/2016/7026169/> |
| **How Does the Article Relate to the PICOT Question?** | This article relates to the PICOT question as it examines the advancement of hand hygiene activities within healthcare facilities for long-term illness interventions. | The article evaluates the compliance to hand hygiene amongst nurses and other healthcare practitioners, particularly in the Intensive Care Unit. | The article examines the effects of the implementation of the Hand Hygiene Improvement Program by the World Health Organization. |
| **Quantitative, Qualitative (How do you know?)** | This is a quantitative study as it premises on question survey guided by the CDC framework. | The experiment is a quantitative study since it uses a direct observation research method. | The research is quantitative because of the extensive use of direct observation study approach. |
| **Purpose Statement** | The purpose of the study was to expedite the timely creation of programs focusing on enhancing hand hygiene practices within the health facilities for long-time care. | To evaluate the compliance of nurses and surgical physicians in ICU to hand hygiene | To examine the impacts of the adoption of multimodal Hand Hygiene enhancement strategies by the World Health Organization. |
| **Research Question** | What are the inconsistencies in knowledge concerning attitudes to hand washing among nurses and other practitioners? What are the existing hurdles to compliance with handwashing guidelines? | Do the surgical physicians in ICU and other nurses comply with the hand hygiene guidelines? | How does the adoption of the multimodal handwashing advanced strategy by the World Health Organization reduce the rate of infections among healthcare workers? |
| **Outcome** | The majority of the participants asserted their familiarity with the CDC guidelines of 2002. Besides, nearly all participants claimed to have a positive attitude concerning the CDC guidelines while believing that they are important to the nursing centers. | Continuous training is important for ensuring adherence to hand washing protocols and sustained performance. | Healthcare-related infections dropped significantly from about 5 to 3.5 per every 1000 inpatient days following the adoption of the wide hand washing or hygiene program |
| **Setting**  **(Where did the study take place?)** | The study involved 17 nursing centers across the United States | The researchers recorded their observations in the surgical Intensive care Unit of a registered tertiary healthcare facility. | The researchers observed hand hygiene practices at Nemazee Hospital, which is a tertiary academic facility located in southern Iran in June 2015. |
| **Sample** | The survey involved a total of 1145 participants working in nursing facilities from different states within the United States. | The researchers observed a sample of 28 nurses and 10 physicians in the facilities. | Researchers observed a sample of 14 healthcare workers |
| **Method** | The survey focused on 52 questions on the CDC guidelines of 2002 on handwashing | The method involved a survey before the study and direct observations on situations concerning hand hygiene. | Observed compliance with handwashing etiquette among healthcare workers within 14 wards. |
| **Key Findings of the Study** | * Lack of washing sinks, paper towels, and soap, as well as hand rubs with alcohol, were some of the barriers to handwashing within nursing home setups. * Most of the participants demonstrated their familiarity with the CDC guidelines on handwashing but only 33% scored above 85% on knowledge queries. | * Compliance with the hand etiquette among nurses before sterilized procedures was below 40%. * Compliance with the procedures after the contact with a patient was 93% against 62% compliance before coming into contact with a patient. * While physicians' adherence rate was 87%, the compliance rate among the nurses was 63%. | * The off-ratio practice of handwashing etiquette was high before touching a patient. * There was an improvement in hand hygiene compliance apart from the risk following body fluid exposure. |
| **Recommendations of the Researcher** | * Because of the increasing elder population residing in long-term healthcare centers, employees for nursing homes should receive adequate education on hand hygiene. * There should be solutions to practical barriers to hand hygiene practices. | * Healthcare administrators should ensure continuous training verbal reminders and performance feedback for the realization of sustained compliance to hand hygiene following the training. | * There should be comprehensive hand hygiene training programs across the world particularly within the nations with low-compliance rates and high-rate of healthcare infections. * Recommended increased local and oriented research for the promotions of hand hygiene. |

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| **Criteria** | **Article 4**  **Published in 2010; not a current study article and cannot be used for papers in this class.** | **Article 5**  **Good Qualitative Study** | **Article 6**  **Good Qualitative Study** |
| **APA-Formatted Article Citation with Permalink** | Kirzner, D. et al. (2010). Focus Group Study of Hand Hygiene Practice among Healthcare Workers in a Teaching Hospital in Toronto, Canada. *Infection Control & Hospital Epidemiology*, *31*(2), 144-150. DOI: 10.1086/649792  **Permalink:**  <https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/focus-group-study-of-hand-hygiene-practice-among-healthcare-workers-in-a-teaching-hospital-in-toronto-canada/642C1C757DEF2A6DD682F6D1BE2C3514> | Gould, D., Middleton, S McInnes, E. & Phillips, R. (2014). A qualitative study of senior hospital managers’ views on current and innovative strategies to improve hand hygiene. *BMC infectious diseases*, *14*(1), 611.    **Permalink:**  <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-014-0611-3> | Askarian, M., Palenik, C., McLaws, M., & Farahangiz, S. (2015). Iranian healthcare workers’ perspective on hand hygiene: A qualitative study. *Journal Of Infection And Public Health*, *8*(1), 72-79. DOI: 10.1016/j.jiph.2014.05.004  **Permalink:**  <https://www.sciencedirect.com/science/article/pii/S187603411400077X> |
| **How Does the Article Relate to the PICOT Question?** | This article discusses the different ways of promoting hand hygiene among healthcare providers. | This article explicates the role of healthcare facilities' managers on the implementation of handwashing practice. | This article examines the handwashing hygiene from the healthcare workers' viewpoint while the authors provide recommendations on ways of enhancing compliance. |
| **Quantitative, Qualitative (How do you know?)** | This is qualitative research because its design employs focus group discussions. | Through the use of face-to-face interviews, the study design demonstrates that this is a qualitative investigation. | The research is a qualitative study because it involves qualitative study methods including in-depth interviews and focuses group discussions. |
| **Purpose Statement** | This study aimed to comprehend the behavioral determinants of handwashing hygiene within healthcare centers. | The purpose of this study was to identify the views of the strategic management on the contemporary and innovative strategies on improving compliance to hand hygiene. | The purpose of this study was to establish different hand hygiene aspects from the viewpoint of healthcare workers. |
| **Research Question** | What are the behaviors that determine healthcare workers’ compliance to hand hygiene? | What are the contemporary and innovative ideas that improve compliance to hand hygiene? | What are the underpinning factors that hinder or promote compliance with hand hygiene among health care workers? |
| **Outcome** | The outcomes of this research include restricted access to supplies as an obstacle to handing hygiene and that the practice of hand hygiene in healthcare facilities aims to ensure personal protection. Also, Teamwork and role models enhance hand hygiene. | This research establishes that the leaders are the influencers of cultural change and that they should link the five moments throughout the patient’s journey. | Among the outcomes of this research include the association between hand hygiene compliance and environmental conditions, the connection between hand hygiene compliance and personal attributes as well as the influence of health systems on the compliance with hand hygiene. Also, the research established the application of improved supervision and ideal policies on the enhancement of hand hygiene compliance. |
| **Setting**  **(Where did the study take place?)** | The researchers carried out this study at the University of Toronto in Mt. Sinai Hospital | The researchers conducted their experiments at 350 beds referral hospitals in Australia's city of Sydney. | The researchers conducted this research in two different hospitals including a private and a public hospital between August 2012 and October the same year in Shiraz, Iran. |
| **Sample** | The research used a sample size of 153 health care practitioners representing the main participant care jobs group. | This study involved 13 participants from various strategic healthcare positions including hospital executives, managers and clinical officers with a minimum of 12 months of experience in the health care field. | The sample size of the research comprised of 80 healthcare workers from the surgery and Intensive Care Units. The participants included 6 attending physicians, 14 surgical ward nurses, 6 nursing and 20 medical students and 24 support staff as well as 16 nurses from the Intensive Care Unit (ICU). |
| **Method** | The researchers collected the data through focus group dialogs. | The researchers employed semi-structured audio-recorded interviews extending for a maximum of 30 minutes. | The research method involved 6 high-level face-to-face interviews and 8-focus group discussions. |
| **Key Findings of the Study** | The research established that there was a significant gap in knowledge of hand hygiene. However, the participants' workloads including interruptions and urgent care made it difficult to observe complete adherence to hand hygiene demands. The research also found that the participants perceived hand hygiene guidelines as extremely conservative. Further, the participants argued that they used gloves as self-protective measures for long while washed their hands mainly after contacting a patient or body fluids. Finally, the research established that the peers' adherence to handwashing practices encouraged the participants to ensure hand washing frequently. | * Hand hygiene practices from the top management to other health workers would influence compliance to hand hygiene protocols among all the health workers, patients, and hospital visitors. * Application of standard education approaches, reminders of the Five Moments of WHO and signage were not implemented and hence the need to refresh and renew the focus, content and delivery strategies. | The primary findings of the research included the following:   * Physicians were the only group that knew the WHO Five Moments for hand washing. * The majority of the participants were concerned with the amount of time required to finish the hand hygiene pre and post patient contact. * Other healthcare workers asserted that handwashing was a protective measure against infections after coming into contact with body fluids, surfaces, and patients. |
| **Recommendations of the Researcher** | * Healthcare facilities and hospitals should conduct healthcare workers’ training on the strategies to manage workloads to enhance adherence to hand hygiene | * The facilities should tailor the hand hygiene five moments to particular settings and roles. * Practical leadership and organizational support including role modeling and demonstrations on hand hygiene. * Plans to reinvigorate and strengthen the hospital's hand hygiene practices. | * Hospital managers should include both continuous interactive training and hand hygiene audit systems to ensure rapid response and high-level compliance. * Increasing resources, application of peer pressure to encourage the adherence to hand hygiene by changing the social norms while emphasizing the need for high-level hand hygiene among patients. * The emphasis that all patients deserve high hand hygiene compliance. |

**References**

Centers for Disease Control and Prevention. (2020). Clean Hands Count. Retrieved 30 January 2020, from https://www.cdc.gov/features/handhygiene/index.html

Mathur, P. (2011). Hand hygiene: Back to the basics of infection control. *The Indian Journal Of Medical Research*, *134*(5), 611. DOI: 10.4103/0971-5916.90985

Shobowale, E., Adegunle, B., & Onyedibe, K. (2016). An assessment of hand hygiene practices of healthcare workers of a semi-urban teaching hospital using the five moments of hand hygiene. *Nigerian Medical Journal*, *57*(3), 150. DOI: 10.4103/0300-1652.184058