XAP Task 1

YourName (First M. Last)

Name of School/Institute (University at Place or Town, State)

**XAP Task 1**

1. **Quantitative Journal:**
* **Introduction:**

The article “Preventing catheter-associated urinary tract infection in the zero-tolerance era” is a research paper related to Catheter-associated urinary tract infections (CAUTIs) for healthcare improvement. It is one of the major infections acquired from the hospital. The scientific research is made to use long term prevention to control CAUTI (Marra et al., 2011). Multiple interventions are presented with proper evidence and experiment to develop an efficient research result. Therefore, the main purpose of the study is to provide a number of preventions to control CAUTI infection.

* **Review of the literature:**

Most of the literature research is made from the web. The main sources that are used for literature review include the peer-reviewed journal, in addition to the guideline from the centers for disease control and other health care organization. The articles used for review are mostly from the year 2009 to 2012. Literature review covers the research related to the basic reason for the infection, most appropriate preventions, the recommendation of different healthcare organization's guideline and the past study related to the microbiological features pertinent to the problems. Although no separate section of the literature review is present, however, literature is reviewed in the different sections including introduction and discussion.

* **Data Analysis:**

The research used a quantitative design to collect data. The study continued for a longer period of time. Due to the long term data, a generalized linear model was used. Through linear model, poison distribution counted the data. The study considered pre and post-intervention periods as the independent variables while all the CAUTI cases studied within the research were dependent variables. Significance level through SPSS software was estimated for the results.

* **Methodology:**

The research method used in the research was a quasi-experiment method. Within the quasi-experimental methodology, a time series study was conducted. Also, a guideline of interventions was delivered to the selected nurses and physicians. Time series study included the thirty-eight bed medical-surgical ICU and twenty-bed SDUs were considered. The study was developed in Sao Paulo, Brazil hospital. The study was carried out in two phases. The first phase was from June 2oo5 to December 2007 whereas the second phase started from January 2008 to July 2010. Both phases were then analyzed through a proper statistical model and the result was developed

1. **Evidence**:

The evidence in all four areas of the journal supports the results and implications of the research and can be used for future research. In the introduction section, scholars have used the evidence from the previous researches which indicates that the most severe factor causing nosocomial UTIs is present in urinary catheter which leads to the CAUTI if a proper intervention is not applied. Therefore, a proper guideline is required for the care of the patient. Researchers used the guidelines provided by the Society of Healthcare Epidemiology of America and centers for disease control as evidence. The evidence is used to develop the whole research, methodology and results are highly dependent on this evidence, therefore, it is the core evidence for the researchers to present their argument and the main purpose of the study.

In the review of the literature, many articles have highlighted the evidence, factors, and recommendations for the Catheter-associated urinary tract infections. No separate section is provided for literature review but evidence is presented from different literature to prove their points and arguments that offer proper guideline to nurses and physician and educational program can be effective for the prevention of CAUTI. For instance, the researchers used the evidence that it is possible to decrease the ventilator-associated pneumonia incidence to the zero periods for a particular time period. Therefore, the study was made by adopting the goals of "getting to zero" and the result has a great impact on this evidence.

In the methodology, the core evidence that is a guideline of different healthcare organization was used. According to the guideline, quasi-experimental research was made. Researchers make sure that they use guideline as evidence to develop a proper methodology which can help to develop an efficient study and effective result for the purpose.

In the analysis section guideline was again used as evidence. The main evidence was used in each step of the research to understand the main outcome of the recommendation and prevention provided in the guideline. The introduction provides the basic information of the evidence. In the methodology section, it has been told that the research methodology was chosen to use all the possible aspect of the guideline. Therefore, the analysis section is also based on the same evidence to proceed with the research in an appropriate manner and the result was made through this statistical analysis.

1. **Ethical consideration:**

The protection of human subjects and cultural considerations were addressed by the researchers. The project was started after the approval from the hospital in Sao Paulo, Brazil. The approval was taken on the basis that the researchers will select the unit of nurses and physician and will be providing them a proper educational program. This selected team will volunteer to help in collecting data for the research. Nurses and physicians selected for the research were directly linked to the catheter patient which means no outsider or a member who is not involved in the practice for insertion or removal of the catheter was considered. It indicate the ethical consideration for the patients.

Furthermore, the data included assessment and weekly report of the patients were studied and collected by the selected team only. However, no clarification is provided regarding the ethical consideration of the study. Like other researchers who provide a separate section to highlight the ethical consideration factors and methods, this research lacks that section. Ethical consideration can be noticed through the research procedure. For instance, only trained nurses were used to assess the patients and to acquire the data which indicates that research was made in systematic manner and researchers endeavored to remove all the aspects which are unethical or can result in harm of any component of the research include nurses, physicians, and patients.

1. **Strength and limitation:**

Every research has some strengths and limitations. This project has also some specific limitations and strengths. The research has a number of limitations. The most prominent limitation is the research was not a randomized trial; it consists of quasi-experimental and time series study. The quasi-experiment is useful for the study where controlled trial is not rationally feasible. Therefore, it was possible that other factor may be correlated with the interventions applied for the data collection.

Besides the limitation of the research, there were some strengths as well. For instance, the research was well accepted by the nurses and physicians, and the result shows the role of the nurses in CAUTIs prevention. Moreover, an educational program was made for nurses and physicians. It helped nurses and physicians to identify the problems during and after the catheter insertion. It is well-structured research which can be used for further research related to the useful interventions and recommendations for CAUTI.

1. **Current Nursing Practice:**

The educational program and method for data collection highlighted the current nursing practice. For instance, after the educational program nurses are equipped to identify the problems of the patients with catheter insertion more rapidly than before. The duration of catheter insertion gets minimized. This implies that current nursing practices are not efficient. Nurses are unable to identify the CAUTI infection on time which may lead to the complications. The practice lacks the estimated time during where patients need the catheter. In other words, nurses do not remove the catheter as soon as it is no more required.

**Qualitative Journal**

* **Introduction:**

The article “A qualitative study exploring the value of a catheter passport” explores the communication gap between the patients and nurses. The reason behind the research was to highlight the problem that is over thirty-seven percent of patients had no statement about the catheter on their discharge slips. They are unaware of the safety measure that is required to be safe from the infection. One basic reason for the problem is the communication gap(Jaeger, Fox, Cooney, & Robinson, 2017). Nurses do not convey basic knowledge about the infection and health care to the patients which sometimes translates into a severe infection. Three main themes are developed through the project it includes; informing nursing, informing patients, and supporting the transition.

* **Review of the literature:**

There is no section of the literature review in the project. Researchers did not discuss the previous researches in the separate section. They have added information from the other research throughout the project which is directly linked to their topic. For instance, in the introductory paragraph, they have added the result of some other research, which indicated the profound impact of the catheter over the human health not only physically but also psychologically and socially.

* **Data Analysis:**

The project is based on qualitative data. Qualitative data includes an interview and a questionnaire filled by the focused groups. Thematic analysis was the method chosen by the researchers. Through thematic analysis, suitable interpretive and descriptive data was collected. Three participants groups were arranged, these groups were divided, and the topic/project was identified to all participants. The division of groups was made manually, i.e. through the collaborative process. The process was used between research nurses and qualitative researchers. They both made discussion and codes were compared to identify the themes.

* **Methodology:**

The research is made on qualitative data. The main focus of the study is made between nurses and patients. Therefore, the study was developed to get information about the experiences of both nurses and patients through catheter passport. The results are developed by analyzing these interviews and free text questionnaire. Thematic analysis was chosen because it is a flexible tool for research. Participants above eighteen became part of the research. Purposive sampling was the method that was used to collect the information from the patents while for nurses focus groups were developed.

1. **Evidence:**

Evidence related to projects was discussed in detail within the section "improving catheter care." Evidence indicates that while the patient gets a discharge with improper or incomplete information related to their catheter, it affects their health in many ways. The main effect that patients face includes social and psychological adjustment. This evidence was taken from past research that was conducted in 2007. Researchers have cited the evidence in a proper manner so it would not affect the credibility of their project. The evidence further argues over the relationship between the patient and hospital staff. The hospital trust is the main factor which can control the catheter infection and therefore become a crucial element of the study. Researchers have used the action of the hospital to take care of their patient, and regarding enough information, they need to provide are considered the main theme of the project. Therefore the same evidence is used in the introduction section to let the readers know about one of the main themes of the project.

As there is no separate section for literature review, therefore, evidence cannot be discussed for this section. Evidence within the data analysis is used which indicates the performance of the nurses and satisfaction of the patient. Evidence shows that many patients complained and explained the fact that no prior information was granted before they got discharged from the hospital. The people above 18 shared their experiences. Another evidence was used based on the guidance provided to the patients. The finding of the research shows that the patients who have proper knowledge about the infection became part of self-care and infection rate among these people is very less. The guidance was provided by the hospital which decreases the gap between the patient and hospital.

The methodology section has not discussed any evidence; rather the researchers used the evidence discussed in the introduction section is the core in for their research. They conducted a questionnaire based on the question that arises from this evidence. Not only questionnaire but interviews also revolved around that one basic evidence. Therefore we can conclude that although different evidence throughout the project is discussed the one discussed in the introduction was the base of the project. It is useful for the results, findings, and future researches.

1. **Ethical consideration:**

The project showed the proper ethical consideration. The project was started after taking approval from the research ethics committee NHS. The approval letter ensures that ethics consideration would be the priority while doing the research. As research is based on qualitative data which was collected through interviews and questionnaire, that means different people and their personal information was required to make the sample for analyzing. The researchers took approval from the nurses and patients who were recently discharged from the particular hospitals.

For ensuring the ethical consideration, researchers created a comfortable environment for the patients who were unable or uncomfortable to give the interview. The researchers conducted the interviews on the telephone for the patients’ convenience. Besides these all personal information including the phone number, address, age, name of both patients and nurses were confidential. Even the names of hospitals were not listed to provide the proper privacy for both groups of participants.

1. **Strength and limitation:**

The limitation of the project is the small sample size. Few patients and nurses were the participants and data was collected through their information. Due to the small sample size, knowledge gathered through interviews and questionnaire cannot be considered as the representative data for the whole population. Another limitation of the project is related to the nurses. Many participant nurses who filled the questionnaire had no catheters passport, and also only five nurses had contacted to researcher personally.

The strength of the project is the presentation of answers given by the nurses and patients. Mostly researchers make tables and analyze the data, but in this project, researchers have shared the responses of the patient which make their project more credible. The sample size was small still researcher successfully highlighted the three theme for their research and result to present some useful information that can be used by nurses for improvement and researchers for further research.

1. **Current Nursing Practice:**

The evidence shows the gap between nurses and patient indicating the current nursing practice. It indicates that current nursing practice is not efficient. The relationship between the patient and nurses should be improved. Beside this, a proper training program is required. Through nursing training, they can enhance their skill of communication as well as can learn about how to teach the patient and their families about basic health care so that patient can adopt self-care after being discharged. The hospital should play their role to decrease the gap between nurses and patients. Nurses are not providing guidance to the patient that they should provide for infection prevention.

References

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