Patient safety management is the most prioritized concern in the modern health care settings. Several quantitative and qualitative researches are being carried out in order to provide the best services to patients. This critical essay will examine the comparison in the themes of the two research papers. Literature in the past has focused on the negative impacts of using this technique in health care setting but fewer studies have been conducted on the positive effects it can impart on the patient safety. Previously it has been proved through literature that EHR has helped in improving the availability and ways access to the data. The collected data on patient health can help in making important clinical decisions and taking ten best course of care. However, the negative impacts of using HER can be the security of the data and mismanagement of the information collected.

 In this exploratory study, the aim of the researchers was to analyse the effect of the electronic health records (EHR) on the safety of the patients as observed by the nurses (Tubaishat, 2019). It was important based on previous findings to conduct a thorough research including the health personnel that are directly involved in delivering the care and how they perceive the utility of HER.

The study is a qualitative research established on semi-structured interviews. It was conducted in the Jordan and only one computerizing system was selected, Hakeem Project, that was used in 12 hospitals and majority of those were located in city areas. Only one system was selected in order to remove any bias thus removing any threats for internal validity as all the nurses who use the same system would have same kind of in-depth information (Halperin, Pyne, & Martin, 2015). Moreover, two hospitals were removed from the study when researchers found out that this system was newly integrated in those healthcare settings and nurses still did not have enough information on its usage or advantages.

The participants of the study were all nurses and before the interviews were conducted, they were provided with flyers to encourage the voluntary participation. The flyers also included all the necessary information about the project including aim and procedure. Only registered nurses that used the system on daily basis were asked to join the study. The sampling was made up to 15 interviews to achieve the data saturation, but additional two samples were added to give validity to it. An interview guide was also generated and tested by researchers and nurses.

The data was collected by conducting interviews on the telephone because it is considered as an efficient method for gathering qualitative data. Telephonic interviews also encourage the interviewees to speak the entire truth and removes the barriers of social awkwardness. The comments and observations and important were taken down as notes. Nurses were asked about their experience and observation on the impact of HER on patient safety. The research was approved by the ethical authorities.

The data analysis was performed following Creswell’s method that has five steps. In the first step, the data was organized, then it was re-read and generalization was made. Then the data was coded and labeled, themes and subthemes were assigned. After that the meaning of themes was interpreted in which the findings of the study were analysed and the results were compared with the previous literature (wilson, 2016). In order to add additional validity apart from the researchers involved in the study, two voluntary researchers analysed the qualitative data independently (ohlund & yu, n.d.). Further reliability was added in the research by taking citations from the participants to confirm that the notes taken during interviews were accurate.

The nurses were based in different geographical locations and they used the same system in different ways based on their responsibilities. The themes that emerged from the data collection showed some enhancements and concerns related to the use of EHR. Many nurses suggested that using EHR minimized the medical errors as paper prescriptions may result in some errors. HER system helps in identifying the accurate doses and medication and also inform about the grave impacts. It also helps in improved and clear documentation of data that otherwise may occur due to poor organization and illegible hand writing. It also ensures the sustainability of the data and no information once stored in it can be deleted. While the concerns related to the use of EHR as described by the nurses included inaccurate data entry and technical problems in using the system. This system also does not give timely alerts about any discrepancy in the policies or procedures and how this system (Holmgren & Ford, 2018).

This research paper also mentioned a detailed discussion about the findings of the analysis and compared it with the existed literature and providing examples. Every comment by the nurses was dynamically discussed and its implications on the patient safety. The paper also included the recommendations to enhance the utilization of the system and intense need to carry out studies in this prospect of health care systems. It also mentioned the limitations of the study that only one system and nurses that used that system only were considered for this research. This enhances the threats to the external validity as data collected from only a small population cannot be generalized and might have errors in the perception and analysing (Gibson, 2017). Moreover, the system is maintained by different vendors and might have different specifics and functions. Also, the interviews were conducted within one timeframe.

The results of the qualitative study cannot be generalized and the results of the study either positive or negative are only considered to enhance the performance of the system within healthcare setting. The paper concluded the study by summarizing the findings and discussions.

The second paper in this essay is about the impacts of automated dispensing cabinets (ADC) on the selection of medications and evaluating the error rates within emergency departments of the hospital (Fanning, Jones, & Manias, 2016). The objective of the study is to investigate the effects of ADC on selection as its implementation is readily increasing especially in Australia.

Medication errors are quitter common in any health care setting and has negative effects on the patient health and reputation of the staff and hospital in general. Medication management in emergency departments of the hospitals pose vulnerability to the services provided. These errors occur due to extreme work load and absence of dynamic information and errors in administering medications and managing emergency situations. Therefore, ADC system is gaining highlight in hospital settings to ensure the efficient services and patient safety.

This research paper is based on a direct observational study in a hospital in Australia. The observations were made before and after the implementation of the ADC. Research was approved by the ethical committee of the hospital. The participants of the research were nurses and proper consent was taken from them prior to their participation. The doctors prescribed the medication on the paper and nurses signed the charts after the administration on the paper.

The paper also mentioned the description of the intervention of ADC and its function that how it is operated. First the patient is selected and then the required medication is searched on the ADC system. When a particular medication is selected, the drawer opens up and releases the medicine.

The data was collected by direct observations from 89 nurses in the old and new emergency departments. the participants were the old nurses who had been working in the hospital for quite a while and had proper in-depth knowledge about the ADC system. The methodology used for observations was based on Westbrook and Woods. It consists of two stages in which during the first step of this method, details about the medication, positive and negative impacts, dosages and administration method chosen and prepared were noted along with patient details. In the second step, the noted details were linked with the patient’s chart to measure the precision of choice and preparation of medications for patients (Payne, Lopetegui, & Yu, 2019).

The main goal of the study was to distinguish among the selection of medication and preparation errors that can be caused by the intervention of ADC system. The selection error was measured as an error in choosing the medication, its strength and dosage form. The preparation error was measured on the basis of preparation of the dosage that caused a wrong medication dose.

The information in this paper is well described and the criteria for selection of participants is mentioned. The error severity was removed as an additional pharmacist rechecked the prescriptions and the medical records. The bias in the study is almost none and there are rare threats to the internal and external validity (Becker et al., 2016).

The results and conclusion of the study is described in the form of statistical analysis and the probability is measures by performing the t-test. The study itself mentions all its limitations and the areas of improvements by providing examples of errors and ways to solve threat and how ADC can overcome these problems.

By comparing the two studies, it is evident that there is still need for literature work on identifying the limitations in the studies and removing the barriers to internal and external validity. The objective of both studies is to analyse the impact of novel systems in the hospital settings for providing efficient health care. Both studies identified the negative and positive impacts and discussed the limitations and prospects of the strategies.

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