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Patient perceived experience with quality of healthcare services in the emergency department observation unit using the generic short-form patient experience questionnaire (GS-PEQ):  
A cross-sectional pilot study

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## ABBREVIATIONS

ED	Emergency department
EDOU	Emergency department observation unit
FHI	Folkehelseinstitutt
GS-PEQ	Generic short-form patient experience questionnaire
LOS	Length of stay
NORPEQ	Nordic patient experience questionnaire
NSD	Norwegian centre for research data
NIPH	Norwegian institute of public health
NOKC	Norwegian knowledge centre for health sciences
OECD	Organisation for economic cooperation and development
PE	Patient experience
VV	Vestre Viken
WHO	World health organisation

## ABSTRACT

**Background:** Patient experience is a very crucial index of high-standard quality healthcare in the emergency department observation unit. According to Norwegian Institute of Public Health, focusing on patient experience may promote improvement on healthcare services. To date, however, there have been very limited studies carried out on patient experience, and its associated factors including the length of stay and socio-demography in the emergency department observation unit.

**Aim:** The study explores the importance of the context of patient experience in the emergency department observation unit by piloting the generic short-form patient experience questionnaire (GS-PEQ), and determining the association of patient experience on the length of stay and sociodemographic as well as the overall association of patient experience.

**Method:** This is a cross-sectional pilot study with 100 patients from the emergency department observation unit ( $n = 100$ ). The Cronbach alpha was also examined to determine the scale's reliability. The association of 12 dimensions of patient experience on length of stay was evaluated with Pearson chi-square test, whilst the association of patient experience with socio-demography was analysed using multiple regression.

**Results:** Patient satisfaction showed association with the length of stay ( $p = .013$ ), whilst the other dimensions revealed no difference. In multiple regression analysis, older patients (66-75 years) were the only factor associated with patient experience ( $p = .029$ ) compared to younger age groups and other variables including the sex, educational level, time of hospital visit and length of stay. The cronbachs alpha was acceptable, 0.621.

**Conclusion:** The present study was the first to examine the patient experience and its associated factors including the patients' length of stay and socio-demography in the emergency department observation unit by piloting the GS-PEQ. The findings were generally positive, and useful for quality improvement.

**Keywords:** patient experience, emergency department observation unit, length of stay, sociodemographic, gs-peq

## SAMMENDRAG

**Bakgrunn:** Pasienterfaring er en viktig indeks på kvaliteten ved helsetjenester i akuttmottakets observasjonsenhet. Ifølge Folkehelseinstituttet kan fokuset på pasienterfaring bidra til å forbedre helsetjenestene. Til dags dato har det imidlertid vært svært begrensede studier gjennomført på pasienterfaringer og tilknyttede faktorer som liggetid og sosiodemografi i akuttmottakets observasjonsenhet.

**Formål:** Studien utforsker viktigheten av konteksten pasienterfaring i akuttmottakets observasjonsenhet ved å pilotere generiske kortform spørreskjemaet for pasienterfaring (GS-PEQ), og undersøke sammenhengen mellom pasienterfaring og liggetid, og sosiodemografiske faktorer samt generell assosiasjon med pasienterfaring.

**Metode:** Dette er en tverrsnittstudie med 100 pasienter fra akuttmottakets observasjonsenhet ( $n=100$ ). Cronbach's alpha ble undersøkt for å se påliteligheten av skalaen. Assosiasjonen mellom 12 dimensjoner av pasienterfaring og lengden på oppholdet ble evaluert med Pearson chi-square test, mens assosiasjonen mellom pasienterfaring og sosiodemografisk ble analysert ved hjelp av multippel lineær regresjon.

**Resultater:** Pasienttilfredshet viste assosiasjon med liggetid ( $p = .013$ ), mens de andre dimensjonene viste ikke noen forskjell. I multippel regresjonsanalyse var eldre pasienter (66-75 år) den eneste faktoren assosiert med pasienterfaring ( $p = .029$ ) sammenlignet med yngre aldersgrupper og andre variabler inkludert kjønn, utdanningsnivå, sykehusbesøk, og liggetid. Cronbach's alpha var akseptabelt, 0.621.

**Konklusjon:** Denne studien var den første som undersøkte pasienterfaring og tilknyttede faktorer som liggetid og sosiodemografiske faktorer i akuttmottakets observasjonsenhet ved å pilotere GS-PEQ instrumentet. Funnene var generelt positive, og nyttige for å evaluere kvalitetsforbedring.

**Nøkkelord:** pasienterfaring, akuttmottakets observasjonsenhet, liggetid, sosiodemografi, gs-peq

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# Chapter 1

## INTRODUCTION

### 1.1 Background of the study

Patient experience, as an indispensable element, is paramount in improving quality health care. (WHO, 2019, McNicholas, 2017). The standard of quality care rendered to patients reflects the factors affecting perception of patients receiving care. Emergency room is indeed the backbone of every hospital wherein patients with diverse clinical health problems are being admitted for immediate care and treatment. (Wright et al., 2013). In addition, several emergency departments consist of an observation unit or short-stay unit where patients with different categories of illnesses, which are not urgent and do not warrant immediate hospital admission, may temporarily be admitted according to clinicians' professional judgment (Lucas et al., 2009). Within this specialised unit in the emergency department, clinicians can perform additional assessment of the patients and other professional healthcare workers such as nurses can also facilitate their care and services (Napolitano & Saini, 2014; Plamann et al., 2018).

Globally, patient experience has been an integral part of health care delivery systems, and this has become and served as one of the most formidable elements in providing quality professional services from healthcare workers among individuals who require appropriate care and treatment with the healthcare institutions including the emergency care settings (Oyegbile & Brysiewicz, 2020). Furthermore, recognising the concept of patient experience may certainly provide the healthcare workers including the clinicians, nurses and other team members to deepen their perspective and understanding that patients are actually an important source of changes in acute care (Galipeau et al., 2015). According to a study, positive experiences of patients may greatly impact the outcomes of their treatments and recovery, and if acute care patients are highly satisfied with their healthcare experience, then there will be a rise in patient engagement as well as shorter stay in the hospital (Damiani et al, 2011).

In Norway, the Health Directorate (2014) has outlined that necessary measures must be implemented designed to meet the needs and stimulate the patients' satisfaction of healthcare experience in the emergency department including its extended area the emergency department observation units. Additionally, this has also been emphasised that it is

compulsory to maintain the integrity of health sector through monitoring and evaluation of the system and staff to improve the quality of care rendered to the people (Health Directorate, 2014). According to the recent report, over 70% of somatic patients require immediate help during the 24-hour period of stay in the emergency department and emergency department observation units (Helse- og omsorgsdepartementet, 2019). Additionally, concerning the rendition of high-standard quality health services among professional healthcare workers such as the nurses and doctors in various acute care settings in Norway, Folkehelseinstituttet [FHI], 2017 has raised prevalent concern about patient experience as this has not been sufficient. Thus, the government has been taking essential efforts with a view to ensure that the general population could receive necessary and efficient emergency medical care and services (Helse- og omsorgsdepartementet, 2019).

To date, very few studies have adequately and systematically evaluated the impact of patient experience and its associated factors including the length of stay and socio-demographic characteristic as well as no previous study has independently utilised the standard short-form GS-PEQ survey instrument in the emergency department observation unit. GS-PEQ is a standard short-form questionnaire which was developed in Norway for monitoring patient experience of healthcare services (Sjetne et al., 2011). The presence of gaps in the provision of care may lead to reduced positive experiences of patients. To address these issues the Norwegian Institute of Public Health (2016) recommends further investigation and improvement in the area of patient experience in order to eradicate potential complications brought about by unnecessary gaps in the care and services as well as improving the patients' trust in the healthcare sector.

## **1.2 Statement of the problem**

As the quality of care is becoming more demanding and complex nowadays, it is important to continuously monitor the progress of overall patient experience. According to Kaplan et al., (2013) health care system has been successful in delivering the care and treatment to patients however, the overall aspects of the system still remain skewed which may result to dissatisfaction of the consumers of health care. Kaplan et al., (2013) added that a systems' approach to health can lead to a better health outcome through structured and evidence-based health care system, health care personnel can provide an effective and efficient care, support, and treatment.

Over the last few years, the Norwegian Institute of Public Health [NIPH], 2016 has pointed out that taking into account and involving the healthcare experiences of patients is crucial in improving the care and services. For the purpose of refining the standards health services in different areas of the hospitals, evaluating and measuring experiences of the patients have been a crucial task in order to uplift the interest and tighter engagement of individuals who are bound to receive appropriate professional help (Folkehelseinstituttet [FHI], 2016). Achieving this goal is of utmost importance in the healthcare sector in Norway. For instance, data on patient experiences were conducted in a number of clinical settings including the emergency department observation units in 2006 and 2011 to 2015.

As a result of national surveys, hospitals were regarded successful in providing and improving efficient healthcare services to healthcare consumers, and patients experienced these services positively on several domains including patient safety, information, care coordination, physicians and nurses' competence and professionalism, organisation (Skudal et al., 2012). Understanding the complexity of patient experience is vitally important if there is a continuous monitoring of care and services' progress necessary to meet the standards and regulations imposed by the health authority as well as sustaining the deliverance of positive experience among patients from diverse groups (Wiig et al., 2013; Davidson et al., 2016).

Although there are reports from Galipeau et al., 2015 as regards to the *outcome* of patient experiences, most are restricted to condition-specific and lack of studies that explore the effectiveness of observation unit at a broader level, and these outcomes are not limited to the length of stay and satisfaction in the context of patient experiences. In addition, according to the Norwegian Institute of Public Health (NIPH, 2017), few studies about the influence of patient experiences of care have actually been investigated in healthcare, and further researches have been suggested about patient experiences across different clinical settings including the emergency department and its subdivision the emergency department observation unit that may lead to a better patient outcome that is crucial to enhance and strengthen the effectiveness and care quality.

In the current study, the researcher aims to address the problems in terms of patient perceived experienced by piloting the generic short-form patient experience questionnaire, otherwise known as GS-PEQ in the emergency department observation unit. This is also to examine the factors that could have an association with patients' experience of health care and services in the emergency department observation unit. Quantitative approach will be utilised

in able to obtain useful and pertinent data with the objective of finding out different factors related to outcomes of patient experience.

### **1.3 Purpose of the study**

The current research is a quantitative study that set out to examine the importance of patient experience with regard to healthcare services using the structured generic short-form patient experience questionnaire (GS-PEQ) survey instrument in the emergency department observation unit in Vestre Viken – Ringerike Hospital in Norway. Additionally, this present pilot study aims to examine the predicting abilities of length of stay and the socio-demographic factors in accordance with patient experience. The study focuses on these key aspects in order to determine their association among variables that may attribute to the experience of patients. Also, this may be a potential avenue for securing that the questionnaire exhibits its adaptability and appropriateness in a broader research that could take place in the future academical and/or practical investigations about patient experience, especially in this specialised unit of the emergency department.

#### **1.3.1 Specific objectives**

The study will concentrate on the following;

- i. To *pilot* the short-form GS-PEQ instrument in the context of patient experience in the emergency department observation unit in Ringerike Hospital.
- ii. To determine the association of the dimensions of patient experience with *length of stay* when receiving healthcare services in the emergency department observation unit.
- iii. To determine the association of *sociodemographic* components including the sex, age, level of education with patient experience when receiving healthcare services in the emergency department observation unit.
- iv. To evaluate the *overall* patient experience associated with the sex, age, educational level, time of hospital visit and the length of stay in the emergency department observation unit.

### 1.3.2 Research questions

**R1:** How does the *length of stay* associate with the dimensions of patient experience when receiving professional healthcare services in the emergency department observation unit?

**Null hypothesis (H<sub>0</sub>):** The length of stay is not associated with the dimensions of patient experience of healthcare services in the emergency department observation unit.

**Alternate hypothesis (H<sub>1</sub>):** The length of stay is associated with the dimensions of patient experience of healthcare services in the emergency department observation unit.

**R2:** Are *sociodemographic* components including the sex, age, level of education associated with patient experience in the emergency department observation unit?

**Null hypothesis (H<sub>0</sub>):** The sociodemographic components including the sex, age and educational level are not associated with the patient experience of healthcare services in the emergency department observation unit.

**Alternate hypothesis (H<sub>1</sub>):** The sociodemographic components including the sex, age and level of education are associated with the patient experience of healthcare services in the emergency department observation unit.

**R3:** Is the *overall* patient experience associated with the sex, age, educational level, time of hospital visit and the length of stay when receiving professional healthcare services in the emergency department observation unit?

**Null hypothesis (H<sub>0</sub>):** The overall patient experience is not associated with the sex, age, educational level, time of hospital visit and length of stay in the emergency department observation unit.

**Alternate hypothesis (H<sub>1</sub>):** The overall patient experience is associated with the sex, age, educational level, time of hospital visit and length of stay in the emergency department observation unit.

#### **1.4 The significance of the study**

The output of the present research tends to raise awareness about the perils of not filling the gaps between patient experience and health care quality, and acknowledging insufficiently the importance of lifting the experiences of the patients that could result to dissatisfaction toward the healthcare industry. It is also important to give focus and necessary interventions for improving patients' experience of satisfaction in the emergency department (Wagner & Bear, 2009; Doyle et al., 2012). The greater the demand of patients' needs, the higher the need for more effective and improved quality of nursing care. More so, health personnel who proceed with and utilize the recommendations in this study may be able to promote the satisfaction that patients are entitled to, particularly in the emergency department observation unit (EDOU).

In addition, this may also guide the researchers to uncover more critical areas that are subject to promising healthcare improvements that have not been explored yet. More importantly, considering different aspects of care should also be considered in the contribution of bringing not just a simple "quality" but rather a "comprehensive and high-standard quality of healthcare" among the population, regardless of their race, origin, and status in life. Further, by utilising the generic short-form patient experience questionnaire (GS-PEQ) in monitoring and assessing the patient perceived experience could facilitate improvement and effectiveness of quality emergency healthcare services in the specific area of the emergency department observation unit following this pilot study.

## Chapter 2

### SEARCH METHOD

#### 2.1 Search parameters

This section entails about the search for the topic which was the patient experience using the GS-PEQ survey instrument, as well as the length of stay and socio-demographic factors in the emergency department observation unit in Norway. However, there is little published research and scant information, specifically on this theme. Hence, the search for these topics were broadened and relevant published research articles were utilised.

##### 2.1.1 Search terms

The search terms such as *pasienterfaring, akuttmottak observasjonspost, akuttmottak, helsetjenester, pasienttilfredshet* were translated from Norwegian to English with the search engine called SveMed+ (Nordtvedt et al., 2012). This had been performed in order to find published articles in the mentioned databases. By finding research articles, then the English keywords and synonyms were utilised in able to have the opportunity to collect and organize research articles that can eventually shed light on the theme or the research questions (Nordtvedt et al., 2012 p. 42-43).

The search used the following terms and its synonyms: patient experience, patient satisfaction, emergency department, emergency department observation unit, short-stay unit, clinical decision unit, medical observation unit, length of stay, healthcare equity, patient centred care, socio-demographic, demographic, gender specific care, nursing care, patient attitudes, GS-PEQ instrument.

##### 2.1.2 Inclusion and exclusion criteria

According to Nordtvedt et al., 2012, it is important to narrow down and limit the research theme in order to lessen or prevent the complexity of searching for relevant publications as well identify which articles are supposed to be included in the search process. Below shows the table for inclusion and exclusion criteria for research articles. (See appendix A).

### 2.1.3 Databases

The search for literature and published research articles was primarily performed with the application of *electronic relevant databases*. According to Nordtvedt, et al, 2012; Bjørk & Solhaug, 2012, databases, which encompass peer-reviewed research papers are important search instruments in the search for answers and scholarly explanations regarding the issues and themes the researchers needed. In this study, in order to find for research articles about the sole theme and its associated factors, the following electronic bibliographic databases in conformity with OsloMet University's recommended standard and academic purposes were operationalised: CINAHL and Medline. To widen the search for additional relevant literature, extended search engines were also used such as the Microsoft Academic and Semantic Scholar.

Additionally, *hand-search* from other related sources of information, based from the included and chosen relevant research publications which contained pertinent information about the theme were applied. (Bjørk & Solhaug, 2012 p. 68). Hand-search refers to critically assessing and identifying updated relevant research sources from the published and also peer-reviewed articles' reference lists as supplemental tools (Chapman, Morgan & Gartlehner, 2009). Bjørk & Solhaug, 2012 underlined that the use of hand-search could also contribute to the search of published articles that cover most of the important contents of publications which could have been missed in database search.

### 2.1.4 Search process

In order to conduct the search for published articles, the following search terms were operationalised in the bibliographic databases: “emergency service or observation units or emergency department observation unit”, “patient experience or patient attitudes”, emergency service or observation units or emergency department observation unit” AND “patient experience or patient attitudes”, “care”, “gender specific care”, “nursing care” AND emergency service or observation units or emergency department observation unit” AND “patient experience or patient attitudes”, gave 458 hits in CINAHL.

While “patient satisfaction” and “emergency department” gave 150 hits in Medline. In addition, “patient experience and socio-demographic Microsoft Academic, gave 64 hits, length of stay and emergency department observation unit gave 380 in Microsoft Academic.

### **2.1.5 Result**

Based from systematic searches conducted, there were a total of 988 published articles retrieved. Further, 29 mostly relevant literature were selected and included, and related articles from the reference lists through hand-search were also included in this study. (See appendix B)

## Chapter 3

### LITERATURE REVIEW

This section features patient experience's empirical/observed and theoretical literature. The review highlights the issues concerning the distinction of patient experience measurement in the healthcare sector, particularly the emergency department observation unit. Since patient experience outcome is achievable through measuring its factors, GS-PEQ is also introduced and discussed. It will then discuss the importance of different factors associated with patient experience in terms of accessing emergency healthcare services. Relevant theories and frameworks in acute healthcare are also utilised in this research. Lastly, the chapter concludes that patient experience is crucial in maintaining the quality and effectiveness of emergency healthcare services.

#### **3.1 Patient experience (PE) –the benchmark for quality improvement in emergency healthcare**

Patient experience is an interpersonal process of care which has been configured by the organisation's culture and is influenced by patients' perceptions. (Wolf et al, 2014; Sagi et al 2016; WHO, 2019). According to National Health Service (2013) the acute care and services the health care organisation is delivering to the patients as well as their significant others are a reflection of how successful and effective the services have been organised. The way the health care system provided their services may greatly leave a strong impression to the receiver of these services which are solely the patients, thus leaving the patients a remarkable footprint of successful delivery of high-quality care may contribute to their recovery (Harrison et al., 2016; Friorio, Gorli & Verzillo, 2018).

In the emergency healthcare, there are myriads of services that different patient from different backgrounds with diverse health conditions are expecting that they are receiving appropriate professional help (Gordon et al., 2010). Through the process of care, the health care system may also help the patients lift their confidence of participating in the changing process including evaluation on how they have experienced the professional support that have been extended to them (Oyegbile & Brysiewicz, 2020). This way the patients may feel more valued, confident and supported because they have been heard, whilst their healthcare need have been addressed as well, and may lead to the possibility of reducing inappropriate admissions (NHS, 2013).

Moreover, patient experience focuses on certain aspects in the improvement of health care quality. Son et al., 2019 asserted that encouraging the patients to actively participate in any improvement activities in healthcare settings may increase the likelihood of providing excellent services in any areas of care. Patient experience is indeed important because this mirror the reputation of any healthcare organisations as such patients who have just received care and services may either experienced this as positive or negative (NHS, 2013). Another consideration is that patients can practice their rights as they can gain their autonomy in choosing the best and appropriate treatments for their health condition, and might help the healthcare team in deciding appropriate measures of their care regime (Sagi et al., 2016).

Further, establishing a healthy professional relationship between patients and health care team is an important aspect as this will influence the care and treatment process (Grocott & McSherry, 2018) This is, for example, if patients are experiencing negative outcomes of care and treatments, this may also affect the overall performance of the health care providers involved (NHS, 2013) Thus, the scope of patient experience provides a thorough emphasis on these aspects for the purpose of refining the healthcare services deliverance whilst focusing and involving the patients as the main contributors of health system development (Luxford & Sutton, 2014).

In the emergency healthcare setting, the context of patient experience is an important channel for enhancing the standards of quality acute care services with a focus on providing the patients the best possible care (Son et al., 2019). As with any other healthcare facilities, emergency departments receive different kinds of patients who are being categorised from severe to non-threatening health conditions. Patients who present to the emergency department may have different needs based from their presenting symptoms, and have been cared and treated differently from each other (Gordon et al., 2010). Since the *emergency care needs* of the individuals could certainly vary, this could also impose that they have the tendency to perceive the acute care services they have received in a variety of impressions and perceptions. Thus, their experience of healthcare in the emergency department is mainly dependent on how efficient and effective the healthcare system is properly coordinated and well-functioned, in addition with the important diverse professional roles of the healthcare team implementing various emergent treatment and procedures to their patients (Doyle et al., 2012; Ackroyd-Stolarz et al., 2011).

The complexity of the emergency department requires consistent effort in promoting and maintaining the quality care they are targeting for the wellness and welfare of the patients,

specially once these diverse group of individuals require emergency healthcare services (Schull et al., 2010; Cleary, 2016). Necessary competent performance of the healthcare workers in the said unit may also lift the emergency department's territorial dignity and improve their image so as to increase the likelihood of putting the patient's health interest at its best (Buerhaus et al., 2012) By being resilient with these particular challenging health services and addressing the needs of different patients, it may be possible to build a stronger, productive and a much safer acute healthcare setting as well as safeguarding the domains of emergency healthcare experience (Blackburn et al., 2019).

### **3.2 Perspectives on patient experience in emergency healthcare**

Central to the entire discipline of health sciences is the concept of patient experience (Bastemeijer et al., 2019). According to Manary, Boulding, Staelin, & Glickman, (2013); Beattie, Murphy, Atherton, & Lauder, (2015), patient experience could be an imperative index with regard to quality of care in improving the services offered by the health care sector because it could have the ability of detecting possible causes of disparities that may eventually disrupts the success of delivering a productive healthcare services for the patients who are in need of professional help caused by their health circumstances. Moreover, although the context of patient experience is relevantly significant with patient satisfaction, the patient experience's characteristics rely on the structures and processes necessary to connect together the patients and the health care system across the continuum of care (WHO, 2019).

According to WHO, 2019 several elements may influence the existence of patient experience, and these are the patients' features, facility characteristics and sort of services. For the *aspect of facility*, it has been pointed out that the ratio of patients, number of healthcare providers that may be assigned to patients as well as the vast of resources and services that patients can received need to be considered. Also, emphasis has also been lifted to socio-demographic factors, medical history as well as the patient behaviour in seeking health care services should be included as part of *patient characteristics*. Furthermore, *different services* can also be categorised as to whether patient needs emergency care or non-urgent care. Although surrounded by these vague factors, it is important for the context of

patient experience to be modified and measured in able to improve the delivery of high-quality care (WHO, 2019).

In addition, as the technological advancements are constantly changing into a more sophisticated approach into the world of healthcare, it is a matter of fact that there is also an increase in the expectations of health services among consumers and complexities of health systems across different nations are flourishing (Fiorio, Gorli & Verzillo, 2018; Fadda, 2019). As such the individuals are becoming critically concern about sustaining their health needs whilst seeking necessary care and treatment from their healthcare providers. The diversity of the roles, practices and innovations that occur within the cycle of health care system and the services this has to offer regardless of the country it belongs has gain popularity (Wolf et al., 2014).

Within this diversity, patients' experiences have become an important indicator of success of healthcare provision (Doyle, et al., 2012). However, research on this specific issue, the patient experience, has also been limited in dealing with the challenges encountered in the particular area of the emergency department, which is the emergency department observation unit. More so, discovering different elements of care could certainly be a useful gateway to the successful deliverance of healthcare. Thus, ensuring these aspects of patient experience including the structure, process and outcomes may promote a well-rounded positive promotion of healthcare (Fadda, 2019).

### **3.3 Instruments as mediums for measuring patient experience in acute care setting.**

According to Jones et al 2013 survey instruments have served as an important vehicle for measuring the population's perception of the care and services they received from healthcare. In order to provide a meaningful and reliable data, considering the use of validated questionnaires in the practice, as a source of appropriate information from the recipients of healthcare, may be able to attain the purpose of the studies in the social and health sciences (Beattie et al., 2015).

As an approach in research, it is also apparent that a need to consider the format and structure of survey tools such as items rated numerically, open-ended or a combination of these since gathering necessary information require diligent and careful assessment and evaluation in order to obtain the desired necessary health outcomes (Jones et al 2013). In a national survey carried out by Buerhaus et.al, 2012, it emphasized that survey research brings

an ultimate impact on the decision making of healthcare professionals in improving the quality of care, which is also based from the data a study may obtain, and this could be possible with the help of gathering information to the patients through valid and approved questionnaires.

Furthermore, the transformation of healthcare provision has remained challenging over the years. In an attempt to overcome the repercussions brought about by inconsistent monitoring and evaluation of patient outcomes as well as to improve the quality of healthcare, several instruments had been developed to identify the needs, expectations and experiences of patients towards health care and services (Bastemeijer et al., 2019). Beattie et al., 2015 have argued that maintaining the quality of care has been a global concern for the inclusion of patient experience in improving its robustness in the care aspect. The transition of studies relating to experience of patients with the healthcare became engaging. As an illustration, previous researches about patient experience were conducted into small scale qualitative approach (Edwards et al., 2015).

Additionally, Basch, 2015 have underlined the importance of evaluating the context of patient experience in the emergency department in order to uplift and enhance the services this area is rendering to its inhabitants universally. Although monitoring the emergency healthcare experiences of the patients are tantamount, there still have been a lack of survey instruments specific to emergency department or acute care facilities that may be able to identify the problems and areas of improvement, and reach out the policy-makers to stimulate the betterment of emergency healthcare system (Oyegbile & Brysiewicz, 2020).

Although survey instruments such as the questionnaires are primarily focused on direct experience of patients and provide credible results or data, who are the recipient of services and care during the process of collection, healthcare personnel may still in the position to upgrade, follow-up and evaluate their performance to attain the quality improvement the healthcare settings aiming for (Gleeson et al 2016). For instance, in Europe and USA the area of gathering information about patient experience to improve healthcare services has been an increasing trend to address the issues about patient experience in any given health settings, including the acute care facilities such as the emergency department (Basch 2015). Without official support and necessary actions, there will be prominent challenges in the improvement of patient experience of care. Therefore, healthcare workers should also be aware of the consequences of the lack of follow up on this area. Thus, trainings may supplement a positive

patient experience which could lead to better patient outcomes (Gleeson et al., 2016; Bastemeijer, et al., 2019).

In light of the increasingly prevalent issues on patient experience, several countries such as the United Kingdom, United States, Ireland, Australia, Hong Kong and the Nordic countries had conducted national surveys, with the help of questionnaires that could aid in the development of an effective and efficient healthcare system (Edwards et al, 2015; Robert & Cornwell (2013); Price et al 2014). These survey tools were howRwe, NSNS, PPE-15, NHS NAIS, ICE (United Kingdom), HCAHPS and PAQS-ACV (United States), INPQCS (Ireland), and HKIEQ (Hong Kong).

### **3.4 The general short-form patient experience questionnaire (GS-PEQ) – a concise tool for both research and practice in healthcare**

In Norway and other Scandinavian countries such as Finland, Sweden and Faroe Islands, developed and validated patient experience questionnaires have also been created and utilised in several health care institutions and departments to measure patient experiences of care (Edwards et al 2015; Norwegian Institute of Public Health, 2017). These are the Nordic Patient Experience Questionnaire (NORPEQ) and the Patient Experience Questionnaire (Norway). Since survey instruments are integral part of measuring and evaluating the extent of patient outcomes across different hospitals and institutions, the Norwegian Knowledge Centre for Health Services (NOKC) made a shorter and generalised form of questionnaire in 2008. (Sjetne et al., 2011; Skudal et al., 2012).

This new version of the questionnaire is called GS-PEQ also known as the generic short-form patient experience questionnaire. Sjetne et al 2011 outlined that this could reduce the burden of utilising lengthy survey instruments and could be adaptable in any type of research or educational purposes, either independently or with other forms of questionnaires, pertaining to patient experiences and is also flexible to use in any type of healthcare settings whether hospital based or institutions. Following the development of GS-PEQ instrument, researchers have already incorporated and administered this tool in their studies in some countries. In addition, it had confirmed that the survey instrument was successfully tested and validated from various patient groups. These patient groups included the rehabilitation patients, somatic patients, psychiatric patients, patients with substance and alcohol dependency, children or the patients' relative or next of kin for both somatic and mental conditions (Sjetne et al., 2011).

With regard to the administration of GS-PEQ survey instrument, a concise and detailed summary of its usages who adapted the questionnaire and further improvised the tool is presented. Table 3. displays some studies where GS-PEQ had been incorporated to some researches to explore patient experience.

*Table 1. Studies about the Patient Experience of care and services which included the GS-PEQ survey instrument.*

<b>Author/Year</b>	<b>Study Site</b>	<b>Structure</b>	<b>Sample</b>	<b>Objective</b>	<b>Conclusion</b>
Hilt et al., 2020	Outpatient clinic for stroke patients (Netherlands)	Cross-sectional interview study and supplemental GS-PEQ questionnaire.	12 patients who experienced stroke (myocardial infarction) and 6 healthcare workers. Out of 12 patients there were 9 (75%) who were interviewed, and of 6 healthcare workers, 3 (50%) were interviewed.	To examine the patients' understanding regarding the information conveyed to them following myocardial infarction episode.	Significant difference between patient and providers' perspectives in terms of information and education post-stroke requires further research to targeting the desired optimisation of patients' knowledge on illness and medications. 50% respondents comprised of men experienced a broad and repetitive information, whilst 1 patient perceived much more information.
Wählberg et al., 2016	14 primary care surgeries and 1 district general hospital (Norway)	Cluster randomised trial/ templates were used in the form of	500 respondents were recruited, where 219 comprised of	The aim was to determine the quality of the treatment and services provided to	There was a remarkable result in patient satisfaction. However,

		laminated reference sheets or electronic. The validated GS-PEQ tool was also incorporated,	controlled group and 281 received intervention. 14 randomised surgical procedures, where 7 belonged to control group and the other 7 belonged to intervention group.	the patients as well as the patient experience during the clinical trial period.	some areas such as information, involvement and interaction need improvement. Results revealed an absence of significance in the GS-PEQ between control and intervention group in terms of regression coefficient (95% CI, p = 0.24).
Solberg et al., 2019	Hospitals and outpatient clinics in Bergen (Norway)	Questionnaire based study including the GS-PEQ survey tool sent through postal mail.	648 total adult patients, but reduced to 589 patients due to 2 deaths and those who did not have a registered postal address and patient who were not	To examine the impact of healthcare experience among adult patient groups primarily diagnosed with ADHD and autism ASD as well as scrutinising the variables that influence patient satisfaction.	Measures to improve to the appropriate information dissemination to those with ADHD are needed to maintain the level of management. Results had revealed different patterns of

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primarily diagnosed  
with ADHD (n=57).

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disorders for both ADHD  
and ASD ( $p < .006$ ).

### **3.5 Domains of quality of care associated with patient experience**

In healthcare sector, patient experience is an imperative marker that has the capability of changing the system (Wolf et al., 2014). It is the main key that could unearth the perils of unsatisfactory healthcare services and serve as a benchmark in the improvisation of high-quality care. According to Bjertnaes et al 2011, issues revolving around the experiences of the patients should not be taken for granted as their voices are channels that connect to betterment of healthcare system. Aside from embracing the importance of patients' perceptions of their care, healthcare providers such as the nurses and clinicians should be aware of their behaviour in performing the tasks they are entitled to. (Tabler et al., 2014).

Therefore, Sagi et al 2016 underlined that a patient centered service is necessary to achieve a positive patient experience. Similarly, Bjertnaes et al 2011 claimed that a holistic approach to improving the effectivity and efficiency of healthcare provision is vital in rendering care to these individuals who are in need of professional support. In view of increased attention to patient experience, several factors have generally been recognised which are essential in quality and system improvement. These are healthcare outcomes, patient-centred care, patient involvement, patient safety, information, organisation, and accessibility (Sjetne et al 2011; Sagi et al 2016). Despite of the fact that these indicators of quality improvement have been essential and widely accepted in healthcare, the research *to date* has paucity and not been able to adequately incorporated and account for all aspects of patient experience in the emergency department observation unit (EDOU).

#### **3.5.1 Healthcare outcomes**

As the healthcare industry figures out measures to provide the best services possible and improve patient experience, efforts on refining healthcare outcomes have also been emphasised as one of the important major factors which contribute in delivering quality care necessary for safeguarding the patient safety as well (Prang et al 2019). The World Health Organisation (WHO, 2018) pointed out that outcome measure is a transformation in the health of individuals or certain group in a community that is receiving any sort of healthcare interventions.

On that account, detecting the gaps within the healthcare sector may build a greater chance to strengthen the knot between the providers and recipients of health care and services

(Carter et al., 2014). According to Kaplan et al., 2013 through the identification of gaps within the system, the health authority may be able to mend the challenges that affect the performance of the providers and advancement of the organisations services. Despite of the challenges that the healthcare industry is facing, they are putting a greater sense of effort to resolve what is actually clogging the system to improve health care delivery (Fiorio, Gorli & Verzillo, 2018). For example, the *length of stay* in hospital settings are among of those indicators that the hospitals constantly keeping an eye for finding suitable solutions (O'Sullivan et al., 2017). Kaplan et al., 2013 claimed that among the strategies to lift the weakness of the system is setting clear priority to patients' needs as well as availability of the system to hearing the patients' voice on how they perceived their experiences as these could be an indicator of the functionality of the healthcare system.

In accordance with Organisation for Economic Cooperation and Development (OECD, 2019), an organisation that cooperates with other governing healthcare bodies worldwide and is responsible for monitoring, providing and reporting evidence-based health care policies on for the peoples' welfare, highlights that there is a remarkable improvement in the delivery of quality health care which also denotes that effectiveness and safety of the patients have been worked out successfully. This is for example in Norway and Iceland, acute care fatalities have declined as these countries have implemented appropriate measures. Although these areas showed significant transformation, some aspects such as measuring the patient experience in healthcare still need further focus so that the health authorities may be aware of the challenges that are circulating around the system (OECD, 2019).

In Norway, it has been reported that the health care system has been improving and exerting effort to provide and maintain the best possible practices that paves way to improved outcomes (OECD, 2019). In its effort to increase the effectiveness of the healthcare services, the Norwegian health system primarily focused on determining the experiences of patients toward the care and services they had received from the providers (OECD, 2019). In order to fully understand what actually is important for the patients, the health authority conducted and studied data accumulated from surveys as a form of patient report (Bjertnaes et al., 2011). Although there were few developments have been noted, Davidson et al 2017 argued that these changes were inadequate and still require extensive studies and a need for more generalised approach to determine the importance of patients' experience in better health outcomes. This finding corresponds to the Norwegian Institute of Public Health (NIPH, 2017)

and justified that more researches are actually needed to ensure that progressive and productive changes are occurring.

### **3.5.2 Patient-centred care**

Safeguarding the needs and values of the patients is an essential approach in maintaining their healthcare experience (Delaney, 2017). Patient-centred care is a holistic approach, wherein healthcare professionals including the nurses and doctors, which provides the patients an opportunity to express their experiences of care by means of feedback or evaluation through involvement of their care (Cleary 2016). McCormack & McCance, 2016 claimed that this holistic care approach is applicable in any sort of healthcare settings which is for example, acute care settings may also benefit from this strategical approach. As the demands of care and services are surging, the health care system is also establishing a valuable and high-quality patient-centred care atmosphere in the healthcare setting as this may lead to positive experience among the individuals who are entitled for emergency healthcare services that they are anticipating from the health care providers (Davidson et al., 2016).

Evidence indicates that patient centred care is among the most critical factors for patient experience (Holt, 2018). Considered to be the pillars of healthcare, Doyle et al., 2012 cited that patient experience, as a conceptual figure in the system, has a strong influence with empowering the patients to be actively involved with their care. Adhering to this strategical approach would enable the recipients of care and services to preserve and exercise their rights and allowing them the opportunity to evaluate the system and health care providers for the improvement of the healthcare system's totality (Kirst et al., 2013).

### **3.5.3 Patient involvement**

In terms of integrating patients in the decision-making process of health care, it is indeed of utmost importance that their involvement is acknowledged by the healthcare team (Bombard et al., 2018). The ideals of patient involvement bring forth into the development of a sound and high-quality care for the wellbeing and safety of patients within the healthcare industry as this also reflects how effective the system is addressing the issues pertaining to patients' perceptions of their care involvement (Andreassen, 2005, p. 55-66; Grocott & McSherry, 2018). Since one of the main focuses of quality care is enriching the patients' participation whilst maintaining their value as a person, the patients may substantially

perceive their experiences in a positive manner knowing that they have been taken care of with respect, transparency and openness (Williams-Roberts et al., 2018).

Many analysts argue that the strategy of how patients were involved in their care to improve the quality of care has not been so successful. Entwistle et al., 2010, for instance, argued that the health authorities across the nations are still struggling in finding ways to increase the patients' experience via participation with their care process in cooperation with their health care providers. This result ties well with previous study wherein Bombard et al, 2018 asserted that an effective and reflective healthcare system should take into consideration the patients' experiences of their care by allowing them to engage in making decisions with regard to health interventions they receive. In addition, Richter & Muhlestein, 2017 emphasised that involving patients is paramount on monitoring the progress of the health system through their experiences. Aside from this, involvement the patients in the care may eradicate the possibility of creating negative reputation and feedbacks as they have prioritised what actually matters and respecting the experiences of their recipients of care and services (Kasper et al. 2017)

A similar conclusion was reached by Wiig et al 2013, a study conducted in Norway. Wiig et al., 2013 underlined that as the health system is aiming for a better patient outcomes and healthcare delivery improvement, there is also a need to incorporate the experiences of patients. This gives more sense in terms of building a progressive and strong health system as patient participation is encouraged. However, according to Newell & Jordan et al., 2015 this may be impossible without sufficient training and understanding from the health care providers on how to engage the patients to participate. It is therefore important that to become successful in capturing the patients experience, proper understanding and training should also be lifted by the health system to their providers (Bombard et al., 2018).

Moreover, the Norwegian Health Directorate (2019) emphasised also that bringing the patients closer to the health care involvement may produce a greater influence on the best possible practices and outcomes the system is substantially building and aiming for. Through the utilisation of necessary resources and upgrading the health system through constant monitoring and cooperation with the health care providers, there will be a greater chance of a more positive healthcare experience and successful delivery of high-quality care (National Health and Hospital Plan 2020–2023).

### **3.5.4 Patient safety**

Patient safety is among the most important and critical factors that healthcare facilities are opting to strengthen worldwide, and ensures that the provision of healthcare treatment is correct and appropriate in accordance with the healthcare needs of the patients whilst they are under the care of the health care professionals (Doyle, Lennox & Bell, 2012). According to recent patient safety report of World Health Organisation (WHO, 2019), an occurrence of unsafe care practices could result to a serious harm or death in 1 of every ten hospital patients internationally, and although almost half of the cases (50%) may be reversible, but there are still a few events that may be considered detrimental.

As such, contributing factors such as incorrect diagnosis, wrong medication prescriptions and medication errors play a major part of incorrect treatments resulting in the failure of providing quality care and negative patient experience (WHO,2019). Despite of numerous focuses on patient safety accustomed by the health governments, Harrison et al 2016 argued that more researches pertaining to the feedbacks of the patients experience on their treatments or any effects of their healthcare services should be encouraged since this area is still limited that may support the improvement of quality care (Harrison et al 2016).

In the last few years, efforts to incorporate the context of patient safety for better quality and competent care have been heightened by the health authority in Norway (Deilkås, Bukholm & Ringard, 2017). In terms of halting any unsafe events in healthcare facilities, the Norwegian health authority is consistently monitoring the health system in delivering safety health services to its people and nation (Norwegian Health Directorate, 2019). However, according to Health Directorate (2019), about 1.9 percent of medication-related errors have been considered the most accountable factor for the incorrect treatment cases in the healthcare facilities, therefore making and implementing best possible measures to sort out the problems that may affect the patient experiences while receiving their healthcare services are crucial.

### **3.5.5 Information**

As the concept of patient experience has becoming more popular, Entwistle et al., 2012 infer that it is also crucial that the healthcare team should build a stronger foundation in

improving their relationship with the patients in order to create a more successful and effective healthcare outcomes which is the main objective of achieving high-quality care in any healthcare settings (Blackburn et al., 2019). This means that giving good and correct information may require an effective communication by the health care team for a safer practice and care delivery, which enable the patients grasp important details of their care (Ward et al., 2011). In this way, unnecessary events such as confusion or misinformation due to lack of understanding may be prevented as well (Grocott & McSherry, 2018).

In *acute healthcare settings*, where information provision is taking place on a day-to-day basis, concise communication is an important mode to boost the patients' active participation through their feedbacks and the health care team supporting them through providing good information (Grocott & McSherry, 2018). A transparent healthcare system is focusing, not only on other aspects of care, but also in intensifying and enriching the providers' skills in communication to provide high-quality care is a big factor for gaining positive feedbacks and patient experience (Newell & Jordan., 2015). Nurses, for example, possess an important role in the healthcare sector as they could be a great resource for conveying information to other members of the healthcare team (Marca-Frances et al., 2020). Recognition of the importance of communication and conveying properly pertinent information to patients could avoid and prevent exposing the patients at higher risk of injury or harm due to incompetence and lack of communication system monitoring among health care provider in acute care settings (Newell & Jordan, 2015).

### **3.5.6 Organisation**

Organisation culture has been constantly evolving in healthcare recently (Parmelli, Flodgren, Beyer, Baillie, Schaafsma, & Eccles, 2011). Health care organisation culture depicts certain factors including behaviours, shared values, norms and perception which influence quality care that create a great deal of difference in any healthcare settings (Braithwaite et al., 2016). In a fast-paced health care environment, where changes are immensely existing, sustaining to survive the complexities occurring within the health care system is a formidable task among health authorities (Pomare et al., 2019). Rectifying the challenges within health care organisation culture for the welfare of the people are one of the major contributions that can be changed and improve the quality of care, fulfilment of

positive patient experience, patients' better access to health system and healthcare providers updated clinical competence (Quinn et al., 2017).

As the changing process is dynamic and comprehensive, Fiorio, Gorli & Verzillo, 2018 asserted that transforming the system also require persistent and dedicated efforts and preparation from the health authority and professionals who are part of the organisation and should be taken into consideration. In particular, to strengthen the forces of organisational changes in health care settings, certain factors should also be carried on in improving the delivery of quality care through involving the health providers in the delivery of care, appropriate upgrading of the health professionals' competence in able for them to provide a more safety environment and high-quality care, reviewing and correcting of issues experienced by the system parallel with the experiences of the patients and staff on care deliverance and hands-on engagement of the management and health leaders (Eijkelenboom & Bluysen, 2019). Considering these suggestions would prevent unsuccessful healthcare organisational changes which hinders the effectivity and efficiency of the delivery of a much higher standards of care (Braithwaite et al., 2016).

Similarly, the Norwegian health care system has introduced the *patient-centred approach* in delivering quality care among its people (Regjeringen, 2019). This strategy has been utilised with the goal of focusing on the health needs of the individuals whose health has been exposed to various illnesses or its health is at risk. According to Helse-og omsorgsdepartementet, 2019, the development and establishment of the National Health for the year 2020-2023 (Regjeringen, 2019) covers the health care system's extensiveness which is an effective avenue in providing necessary measures not only on the structural changes in any healthcare settings including hospital trusts and municipality health services brought about by this method. In addition, both the providers and the recipients of care as well as the recent technological advancements needed to ease the treatment process of the vulnerable individuals, thus the comprehensiveness of the program's future goal is primarily focused on providing a patient-centred care approach to its inhabitants which enables the health care team to deliver a safe high standard quality care (Helse-og omsorgsdepartementet, 2019).

Accessing the healthcare with the absence of obstacles in order to receive appropriate care and treatments is one of the most vital components of creating the patient-centred strategy in emergency healthcare organisation as the modern era is already encapsulated with individuals who were predisposed with the diversity of health conditions, and the increasing

aging population who also need attention in receiving better healthcare services (Marca-Frances et al., 2020). As the scope of the healthcare system in Norway is well-defined and comprehensive, the healthcare services are not limited to acute care. Emergency healthcare, for example, is among of the elements within the system that the health authority is taking into account (Helse-og omsorgsdepartementet, 2019).

### **3.5.7 Accessibility**

According to World Health Organisation (WHO, 2019) equity in healthcare is an imperative notion, and this means that people regardless of its origin or status in society should have an easy access to healthcare services. In addition, the Universal Health Care (UHC) as a general worldwide program for healthcare services, aims to promote betterment of access by focusing on several healthcare areas including the acute care services (WHO, 2019). Further, it is emphasized that all citizens regardless of their background and financial turmoil should receive the necessary professional treatments they are entitled and the health system in every country is targeting the best possible healthcare outcome for its inhabitants. (WHO, 2019)

In terms of healthcare accessibility, Norway is among those countries which are providing comprehensive and resilient health care coverage. The Universal Health Care (UHC) as a strategy is aiming for better patient outcomes without installing financial burden in its population to receive necessary healthcare services whilst maintaining the fundamental rights of the people in healthcare, and is connected to that the World Health Organisation's Sustainable Development Goals (SDG) has established. Moreover, the Regjeringen, 2018 have asserted that there should be an equal access to healthcare in its inhabitants. The coverage for this equality of healthcare services includes all areas of healthcare levels from the primary health care to specialist health care as this may lead to better delivery of quality healthcare (Regjeringen, 2018).

Despite of advantages and benefits brought about by the universal health system from all walks of life, pitfalls are still present in some areas such as immigrants, which also are considered as contributors of successful healthcare deliverance, as this also affects patient experience in terms of accessibility and quality of care. (Småland Goth & Berg, 2010). Kjøllesdal et al., 2020 further argued, however, that with equal rights and access to healthcare, satisfaction of the recipients of care on their experience of care is highly

influenced to a greater degree since patient experience of care and services is substantially an essential factor in maintaining the integrity of the health system. Since determining success of healthcare access in accordance with patient experience is also challenging, an important strategy to capture if the accessibility has reached its goal is through measurement with aid of survey instruments. (Quinn et al., 2017).

### **3.6 Emergency department patient experience**

According to Baugh et al., 2011 an emphasis on the surging interest and concern in the aspect of patient experience in the emergency departments occurred recently. Most hospitals are keeping an eye on the factors that may influence the healthcare services they are offering to their patients as well as the various experiences of patients during their hospitalisation (Manary et al., 2013) Since the emergency department is designed for accepting patients with different acute medical conditions, this unit is opting to create a comfortable and safe atmosphere, but unpredictable situations inside the unit may also occur including insufficient communication, inadequate pain management, distressing and congested emergency department because of the fast-paced environment (Sonis et al., 2017) These are some of the challenging circumstances that may arise despite of the effort the health system is providing for the patients and this may remarkably affect how the patients perceive these stressors in their emergency experience in the unit (Buchanan et al., 2015).

Furthermore, Galipeau et al., 2015, have purported that the comprehensiveness of emergency department requires constant monitoring of the progress of the delivery of care as the ultimate goal in this department is to reduce the predisposing factors that is damaging the reputation of the emergency healthcare whilst increasing the experience of the patients presenting to the acute care settings positively. Therefore, the success of eradicating the factors that is preventing the positive patient experience in the emergency healthcare certainly solely rely on the on how flexible and transparent the emergency healthcare organisation's management engaged their patients to participate in the process of improvement as well as how the health care providers are well-equipped and competent in performing their tasks and efficient response to the meet the emergency needs of the patients. (Richter & Muhlestein, 2017).

On the other hand, Carter et al., 2014 argued that there are issues that need to be resolved in order to promote better delivery of care, healthcare outcomes and safety of the patient in the emergency department, for instance congestion in the emergency unit, serious problems which is subject to implementing necessary and imperative measures. By overseeing this kind of issue may lead to critical repercussions that can also influence the patient experience. Due to the surging number of acute patients presenting in the emergency department over the years, the establishment of the emergency department observation unit (EDOU) has been put into reality (Baugh et al., 2012).

Thus, most emergency department short-stay units are actually positioned within the vicinity of the emergency department for an easier access of the emergency staff (Baugh et al., 2012). However, Galipeau et al., 2015 emphasised on some factors including the *length of stay* and patient perception of their care which accompany the emergency department observation unit that these should also be addressed in a general sense as these may to a larger extent affect the healthcare outcome and delivery of quality care.

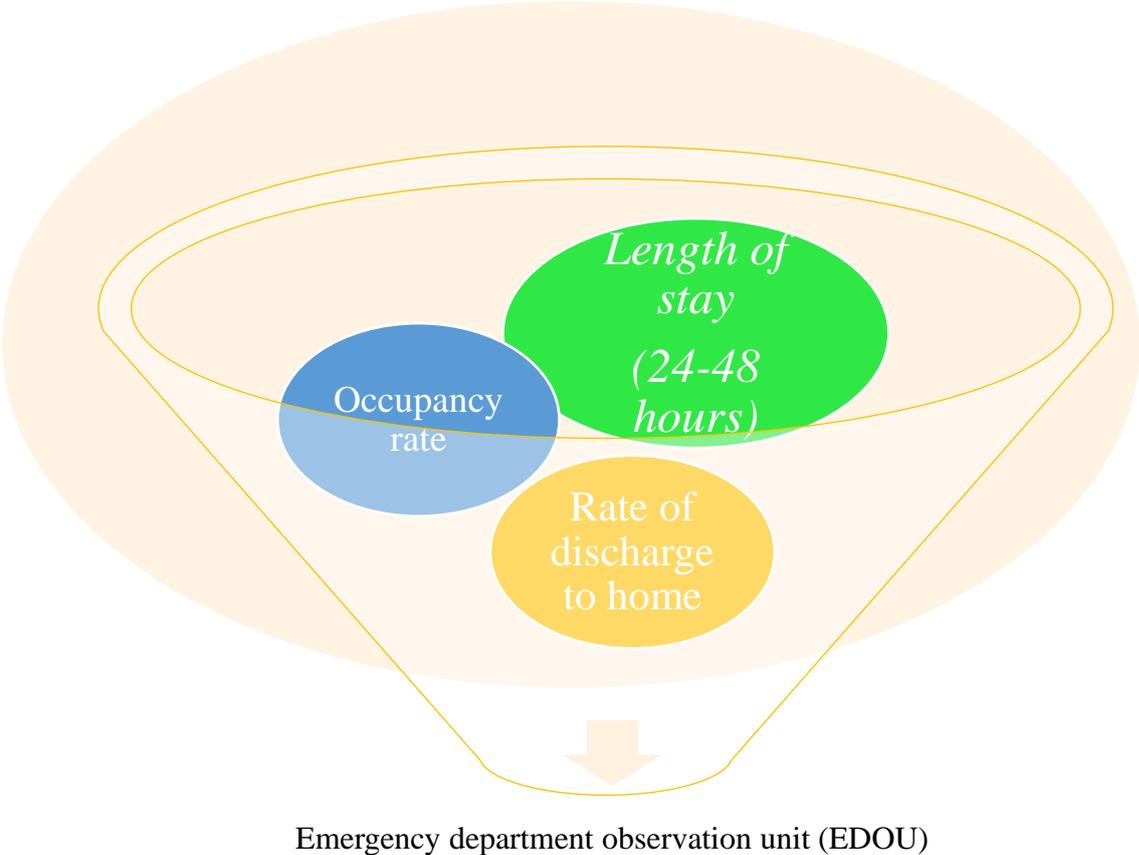
### **3.7 Emergency department observation unit – a subspecialty area for observational care.**

The emergency department observation unit (EDOU) has been increasingly known as a standardised fundamental part of an emergency department (ED) which filters inpatient capacities in most hospital settings whilst receiving necessary access to quality care (Napolitano & Saini, 2014). According to Juan et al., 2006 & Baugh et al., 2011, this unique department also carries several names including short-stay unit or clinical decision unit.

According to Damiani, Pinnarelli, Sommella, Vena, Magrini & Ricciardi (2011), the primary principle in establishing an observation unit within the acute care settings is to safely manage the acute healthcare needs of patients with different sort of health conditions which require further testing and assessment such that clinicians and other healthcare team that are closely observing the patients' condition can be able to make appropriate clinical decision as to whether the recipients of care are needed to be discharged, transferred and/or be sent to the hospital wards for continuation of care and treatment (Napolitano & Saini, 2014). Based from the decision of the emergency physicians, patients who warrant continuous observation are staying in the emergency department observation unit (EDOU) for 24 hours wherein their

condition has clinically stabilised. Meanwhile, for those acute patients whose health status has not changed and is worsening, they will be transferred to hospital wards. Also, due to some diagnostic procedures and further testing, for instance patients with chest pain (diagnosis specific) or a combination of diagnosis (non-specific), observational patients can stay for a window period of until 48 hours (Galipeau et al., 2015; Plamann, Zedreck-Gonzalez & Fennimore (2018).

In terms of a better understanding on the usefulness and effectiveness of emergency department observation unit, Hess & Nestler, 2012 illustrated the functionality of this unit on certain components and how these elements are interacting and influencing each other. These primary variables affecting the organisational structure and functionality of the emergency department observation unit (EDOU) are the occupancy rate, *the length of stay* and the patient discharge. As the emergency department observation unit is solely for short-stay admission for non-critical acute patient, Baugh, Venkatash & Bohan, 2011 had emphasised that meticulous selection of patients by the emergency physicians is very important as this may reflect the effectiveness of the unit as well as it may eliminate unnecessary inpatient admissions.



*Figure 1. Essential components of emergency department observation unit care. (Baugh, Venkatesh & Bohan, 2011).*

According to Plamann et al., (2018) efficient and effective utilisation of the emergency department observation unit as well as adequate use of resources such as the healthcare providers and innovations in delivery of high-quality care can lead to improved patient experience. Since there is a significant surge of patients presenting in the emergency department over the years, an observation unit can be an ideal place for these patients to be taken care of by multidisciplinary healthcare team whilst the patients' condition has not yet been ruled out (Baugh et al., 2011).

As the unit is specifically designed for short-stay observation among patients with various health issues, the unit has criteria for selecting appropriate clinical observation patients (Napolitano & Saini, 2014). When considering selection of observation patients, clinicians are in the position of carefully assessing the severity of patients' condition, and although these acute patients are required to only stay for a short period within the unit, their experience of care is also as important as they have received appropriate healthcare services (Hess & Nestler, 2012). In addition, providing the best possible healthcare outcomes and high-standard patient safety principle to these patients are crucial, therefore targeting a reduction in the patients' *length of stay* (LOS) in the emergency department observation unit has been considered one of the factors which need to improve and monitored as this may also influence the quality care deliverance (Lucas et al., 2009).

### **3.8 Length of stay in the emergency care setting**

The effectiveness and efficiency of healthcare services can be determined through the length of stay of patients (Mentzoni et al., 2019). Recent studies showed that there is about 20 % to 30 % surged in the mortality rate related to prolonged emergency department length of stay (Forero et al., 2010). According to Baek et al., 2018, the length of stay has been considered as an imperative index of evaluating healthcare organisation's approach in handling and maintaining the quality of their services, and that focusing on the context of length of stay may permit the hospital's management to identify possible problems and refine unnecessary areas that may certainly affect the outcomes of their services. Additionally, by considering this area of improvement, the progression of unacceptable events can be halted

as these can add to the burdens brought about by unsuccessful duration of patient stay in the hospital's department (Braitberg, 2012)

If there is a significant upsurge on the area of length of stay of patients in hospital, then there will also be an escalating ratio of undesirable circumstances that may mitigate the delivery of high-quality care (Ackroyd-Stolarz et al., 2011). For instance, the side effects of medications, patients' exposure to infection, inter-department transfer delay due to fully accommodated facilities, bed capacity, the density of patient cases for surgical operations and severity of patients' condition are contributing factors that were identified in some published literature that may cause the inefficiency of the length of hospital stay of the patients (Mahsanlar et al., 2014). Due to prolonged length of patient stay in the hospital, the safety of the patients can also be at stake without providing effective and necessary measures in the betterment of reducing their duration of admission. Thus, this may make them more susceptible to poor healthcare outcome and lowered satisfaction of their care experience. (Vermeulen et al., 2015; Andersson et al., 2020).

As with any other countries, Borghans et al., 2012 claimed that quality improvement and patient satisfaction of their care experience is crucial in Netherlands, and that many factors such as ineffective communication and lack of cooperation, waiting times and management have been associated in the increase length of stay. Apparently, these may affect the length of stay of patients. Therefore, monitoring patients' experience of their care as to whether they are satisfied or dissatisfied is an important indicator of improving the health care services. Hence, the effort of considering improvement of length of stay may possibly lead to better quality of care and satisfaction of patient experience of their care. (Yong et al., 2011).

Meanwhile, In Norway, a previous study about the length of stay in hospital emergency department has been conducted (Mentzoni et al., 2019). An increase in the treatment delays, negative outcomes and patient dissatisfaction led to the investigation of how the duration of patient stays in the emergency department has affected the provision of quality care. Carter et al., 2014 outlined that increase in the prolonged length of stay is associated with the congestion in the emergency department's environment wherein those have not been cleared yet for transfer in other departments have been overlapped by those who have arrived recently. Therefore, in addressing these concerns of length of stay, patients who are considered non-critical but still need emergency care are then transported to the clinical decision unit for further observations. Since length of stay contains several causes that may

pose bigger challenges and impede the provision of high-quality care, further research on the aspect of length of stay in a general approach has been recommended (Galipeau et al., 2015).

### **3.9 Sociodemographic determinants of emergency healthcare**

Addressing appropriately to the issues caused by the defects of quality care delivery in the health care is indispensable, and distinguishing certain and appropriate populations in evaluating the progress of delivery of healthcare may augment to the success of healthcare management (Williams-Roberts et al., 2018). Furthermore, integrating the social determinants as a robust foundation in the investigation of the problems that have caused the ineffectiveness of the health care system may deem necessary and critical in the emergency care setting (Davis et al., 2020). In addition, several factors that also are considered crucial in the development of quality care are identified as the sex, age and educational attainment among others (Versteegh & Brouwer, 2016).

Through the association of socio-demographic background, researchers may be able to identify certain groups or areas that may necessarily need further assessment and improvement as well as adjusting and refining potential or actual problems that could arise in a variety of healthcare institution, including the emergency department (Chiu et al., 2014). Thus, these components may serve as a crucial indicator of providing equity in healthcare services and promote better health outcomes (Van Dongen et al., 2019). Although the context of health care delivery improvement has been acknowledged recently, consistent monitoring of socio-demographic data is still insufficient, and the inadequacies of evaluating this aspect could pose risk as to whether the healthcare professionals are actually competent in the aspect of patient experience, as well as differentiating patient groups in terms of their care based on their sociodemographic background (Kirst et al., 2013).

Djordjevic & Vasiljevic, 2017 argued that a deeper understanding of measuring and collecting pertinent socio-demographic data is needed in scrutinising areas of improvement in healthcare studies. Additionally, by understanding the importance of socio-demographic factors through the data being provided, can health researchers acquire knowledge on the structural complexities of health care system for enhancing the rendition of quality of care (Davis et al., 2020). However, Kirst, Shankardass, Bomze, Lofters, & Quinonez (2013) expressed also that approximately 40 % of the participants responded that collecting socio-demographic components was not important as an integral part in the healthcare settings for

the purpose of monitoring equity in healthcare delivery. It is believed that these perceptions and responses were due to unnecessary utilisation of the participant's information and the possibility of experiencing discrimination (Kirst et al., 2013). Hence, educating and providing the individuals with appropriate information in terms of the inclusion and collection of the socio-demographic from diverse patient groups as an integral part of quality improvement of care delivery in the healthcare settings is paramount.

For example, the concept of equality in accessing even distribution of healthcare services enabling individuals meet their needs are prompted (Buja et al., 2015). Moreover, ensuring that patients are meeting their needs and receiving equal services with the same standard of care quality, monitoring should be considerably taken as part of safety protocol in maintaining the efficiency of services offered and delivered in the hospitals (Buja et al., 2015). To illustrate, in a study, Bertakis, 2009 had investigated scrupulously measures that may influence the deliverance of effective communication among patients, wherein the study distinguished the causes of insufficient information by sorting out the differences between male and female groups and how did this circumstance actually affected their interactions with the healthcare providers in order to come out with necessary solutions that posed health disparities.

Furthermore, Chiu et al., 2014 have documented that integrating socio-demographic factors as one of the indicators of assessing experiences of the patients in the emergency department may aid in delivering high-standard quality care. As such, collecting pertinent patient data based from the characteristics of the patient groups may be able to capture the important areas bound for restructuring or improvement so as to increase the positive experience of patients while giving them the opportunity to receive equal treatments they deserve regardless of the status they belong or characteristic in a certain group (Sun et al., 2019). Diverse patient populations, for example, being presented in the emergency department including the vulnerable groups and the older population (Kirst et al., 2013). As their patient experience varies in each category, it is also crucial to carefully evaluate their needs. Another example is the sex and educational levels of patients and on how they want to be taken cared, and their satisfaction level parallel to their level of education as well (Milutinovic et al, 2012; Dzomeku et al, 2013; Karaca & Durna, 2019).

However, to be able to investigate the variations of their health care needs based from their categories, provision of socio-demographic should also be taken into account (Chiu et

al., 2014). This way, the health care system may be able to better understand the differences between patient populations while giving appropriate care, Sun et al., 2019 also highlighted that involving data obtained from the sociodemographic components may be of advantage in investigating the factors that may influence the emergency care delivery. These are the *length of stay* and information dissemination through communication in the emergency health care (Schull, Guttman & Leaver, 2010).

As patient groups consist of different characteristics, Willems et al, 2005 have also claimed that socio-demographic is useful in obtaining necessary information from patients in the search for appropriate answers and measures in the provision of quality care, and has been an important part of strategical approach because it could determine differences between groups in a population and predicts the causes of certain challenges which hinder the provision of quality care among diverse groups of patients. Further, since there some imminent occurrences of discrepancies in health care, Chiu et al., 2014 underlined that the utilisation of socio-demographic could be a medium for change and improvement in such a way that it deepens the understanding why certain health incidents are appearing, its influence on human population, establishing solutions and alternatives that may substantially restructure the health care system.

Recognising patients' characteristics may, therefore, be a critical step in maintaining health goals, whilst providing high-quality care in meeting the needs and preferences of different patient groups across the continuum of health care (Sun et al., 2019).

### **3.10 Frameworks of patient experience**

Globally, the patient experience has been acknowledged as a core element in balancing the foundation of health care system. (Kash et al., 2018). As such, an in-depth and broader comprehension of what it leads to better experiences of patients is a pertinent agenda in fulfilling and completing the task of providing quality healthcare among the healthcare stakeholders. Despite of the notion that the patient experience is increasingly becoming popular over the years, little has been known about what actually constitutes the concept of patient experience in the health care sector (Oben, 2020).

Oben, 2020 argued that defining patient experience is paramount wherein it makes the horizon of the caring aspect more meaningful and efficient. Through this, it could be easier and more effective for the healthcare providers to deliver a standard quality care because the primary role of those who are engaged in the healthcare are serving humanity, and this means that providing equal and quality care, the intention is actually focused on patients and delivering the necessary care and services they deserved in a holistic approach (Kash et al, 2018). Therefore, the concept of patient experience may deem important in all aspects of healthcare, and the knowledge of this concept is not just crucial in understanding their needs, but also in improving the care they are receiving based from their experience (Jha et al., 2017). Additionally, this concept could be utilised through both in the clinical and research aspects in the effort of improving and better delivery of high-quality care (Oben, 2020).

### **3.10.1 Theoretical framework of patient experience in emergency healthcare.**

In view of implementing effective and safety provision of care, Kash et al. (2018) demonstrated a new model for a more comprehensive understanding of patient experience which could be of great advantage in attaining positive patient experience and better health outcomes. Since this concept has already been recognised worldwide, the challenge now is on how to cope with the health disparities faced by the health care system and improving the performance provided by the health care providers enabling the system to compensate on the pitfalls caused by unnecessary circumstances experienced by the patients (Kash et al., 2018).

In this strategy, quality improvement has been the focus in order to provide positive experience in the healthcare. Kash et al., 2018 claimed that utilising the theoretical features of this model into clinical practice may help in the fortification of quality care deliverance. Since implementing appropriate and professional care and services are comprehensive, this strategy has included four significant Ps of patient experience which can also determine and identify some weak points in the health care system which need to restructure. These four Ps (levers) of patient experience are the *physicians, partners, places and processes*.

Since the physicians, nurses and other allied healthcare team members are the sources of providing appropriate and safe health treatments and services, the health care stakeholders ensure that their healthcare providers are in the right track of maintaining their professionalism, autonomy and competence in order for their patients to receive sufficient and quality care (Kash et al., 2018). Health care organisations should, for example, consistently

monitoring that the physicians, nurses, and other health providers' skills and knowledge on their field of specialty are actually up-to-date, and ensure that they are undergoing constant trainings and information on the significance of multi-faceted health care strategy which may deem important for thorough and efficient coordination of care with other health care team (Kash et al., 2018).

Additionally, knowing patient groups is as important as providing high-quality standard of care (Kash et al., 2018). Health care settings are constantly receiving patients with different kinds of health conditions, thus organising appropriately the services are vital. Since these patients have various health needs and conditions, they may be required to be designated in different areas of the health care settings where appropriate delivery of care and services occur. As such, the *places* where connection between health care members and patients occur could be the *emergency departments*, outpatient centres or within the home of the patients. An effective and efficient process may enable to build a stronger and attractive health care system. When patients feel that they are being safeguarded and their health needs and preferences are being taken care of, the patients will absolutely trust their health care system and health care providers (Kash et al., 2018).

In this framework, as the focus of this strategy is improving the quality care, better clinical outcomes and a positive patient experience, and the four aspects have been determined as an imperative vehicle in facilitating better clinical outcomes and quality improvement. Each of these factors play an important role in building the patient experience. To ensure that the patients are receiving appropriate high-quality and appropriate care and services, the health care organisations should ensure that they provide adequate skills and competence training programs for their staff. Providing standard quality care may deliberately open bigger opportunities for the health care system to showcase their different expertise of care and services, whilst having the patients to be at the centre, hearing, supporting and connecting with them is of utmost importance when aiming for a better and positive patient experience (Kash et al., 2018).

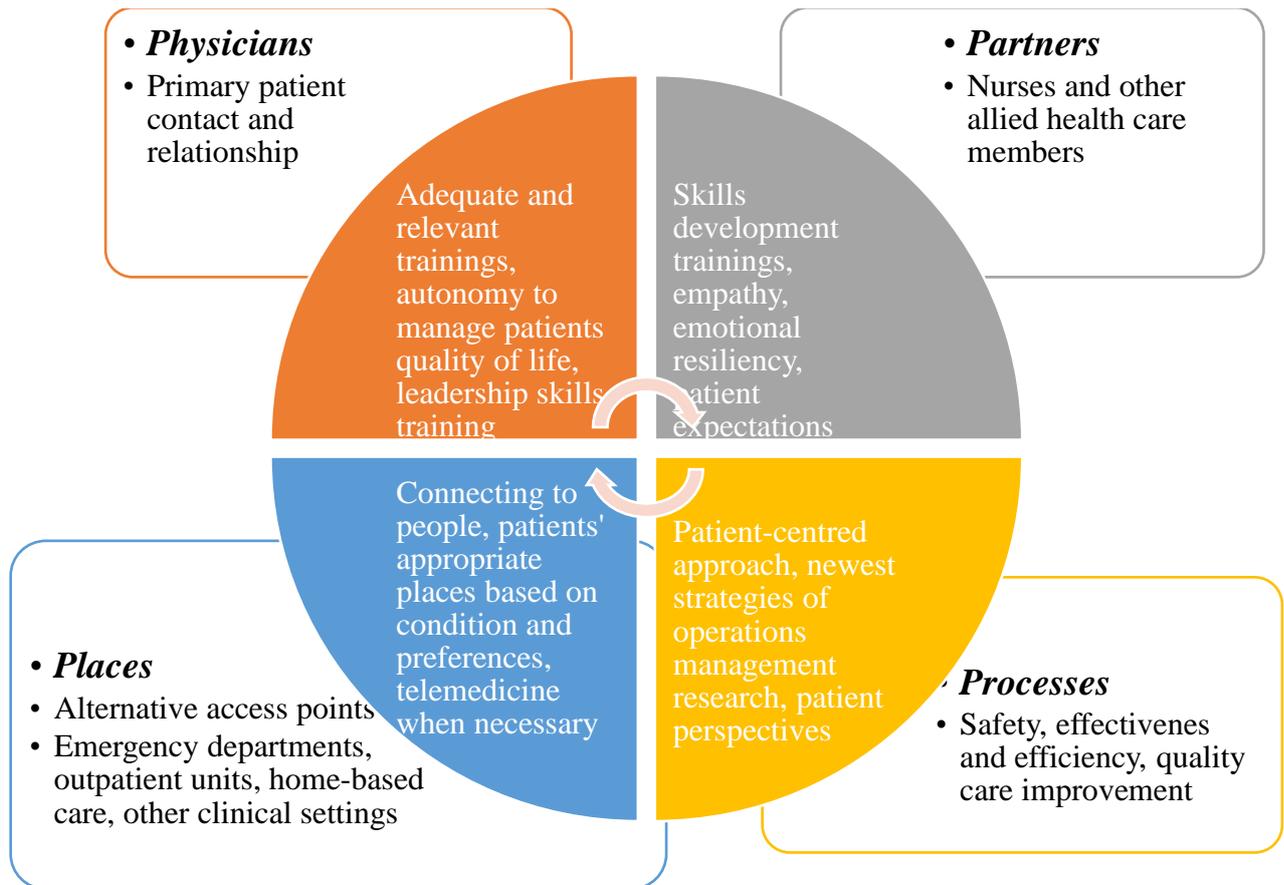


Figure 2. Healthcare system collaboration (Kash et al., 2018).

### 3.10.2 Conceptual framework of patient experience in the context of emergency healthcare.

In the area of emergency healthcare, the concept of patient experience is becoming an essential focus in the allocation and improvement of standard high quality acute care (Sonis et al., 2019). In this conceptual framework, it has been highlighted that the development of this structure represents essential factors which influence patient satisfaction based on the experiences that the patients have encountered in the emergency department. The newly constructed evidence-based framework deals with identifying components, improving, and promoting patient satisfaction associated with the delivery of quality care and services (Sonis et al, 2019).

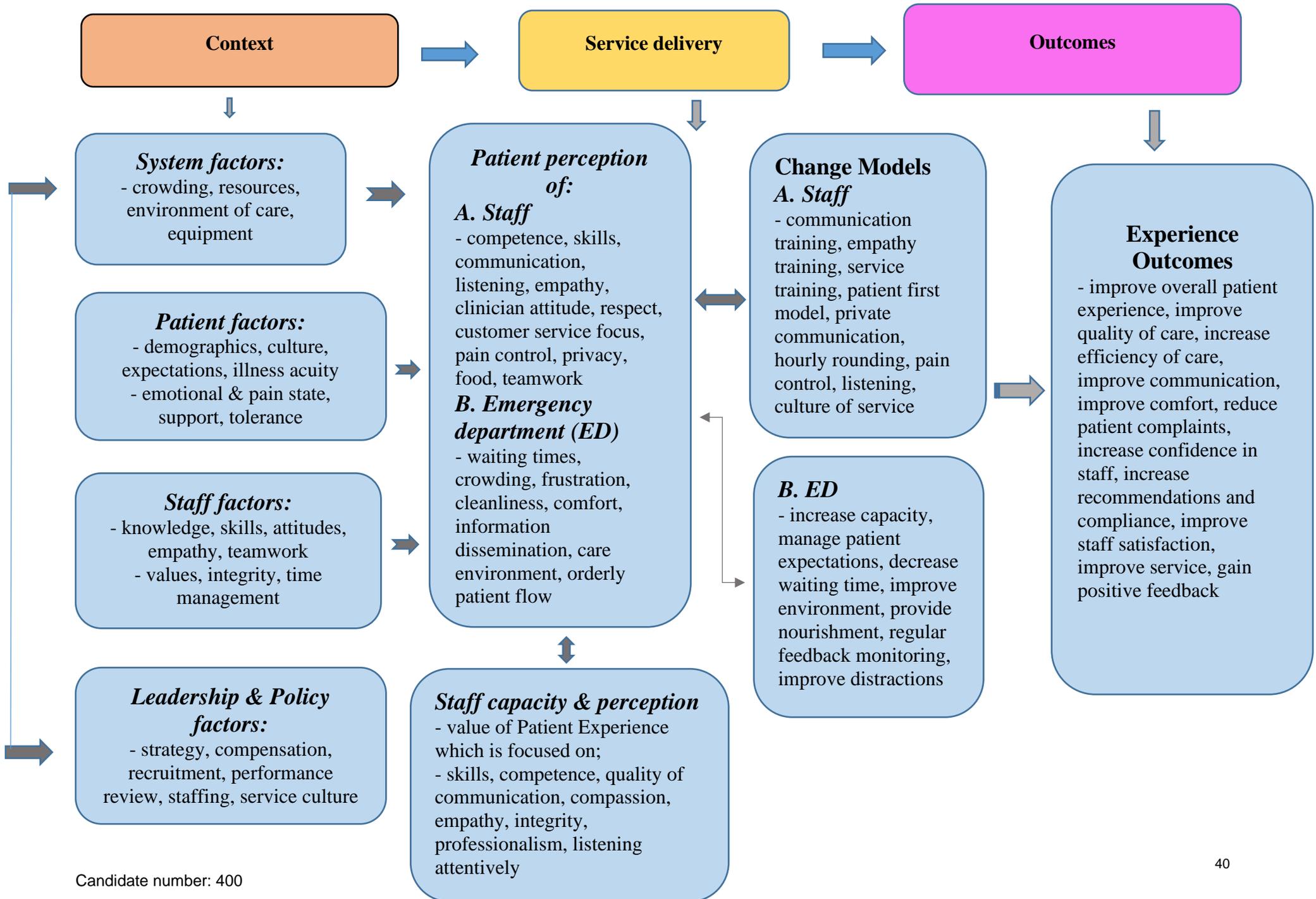
The main contributing components that outlined the evidence-based logic model are;

- *context* including the patients, staff, system policy and leadership
- patients and staff perception of *service delivery*,

- staff such as nurses' *change models*, emergency department (ED) *change models*
- patients' *feedback and outcome* based on their experience.

As outcome of rigorous scrutiny of published literatures in the purpose of creating a foundation for strengthening high-quality standard care, Sonis et al. (2019) have also revealed crucial factors that may certainly influence the experience of patients during their hospitalisation. Sonis et al. enumerated those points that have come up which is needed to be monitored in the acute care as they can be a potential threat when not taken into serious consideration and may lead to undesirable outcomes in providing care and services to the acute patients. These are the patients and health care providers' communication, waiting time and crowding, health professionals' compassionate and empathetic approach toward their patients, professional support received by the recipients of care, health care management and experience encountered by the health care providers as well (Sonis et al., 2019).

Although the framework is designed for general purposes in the emergency department by the staff, the researchers strongly suggest that it is adaptable in conformity with promoting positive patient experience in the acute care settings (Sonis et al., 2019). Indeed, the goal of this model is to identify the gaps and determine those areas that need improvement and to give patient a well-rounded experience of care that will increase their satisfaction during hospitalisation. Besides, Sonis et al., (2019) recommend the framework for further usage and validation of clinicians including nurses and other allied health care members who are also directly involved in the care of patients. Below presents the conceptual framework for acute care setting.



*Figure 3. Evidence-based conceptual framework of patient experience in the acute care setting (ED). (Sonis et al., 2019).*

### **3.11 Literature review summary**

Patient Experience is indeed the cornerstone of effective and efficient delivery of quality care in healthcare. A broader and deeper understanding of patient experience is absolutely a germane mechanism in developing the quality of care the health care system and their professional care providers are engaging. With insufficient knowledge and skills in protecting the patients' welfare, it is impossible to acquire the best possible practice and outcomes. Hence, the utilisation of frameworks and constant monitoring may opt to strengthen the comprehension of all involved individuals in the healthcare. With this, appropriate measures can certainly be demonstrated and the weak spots within and beyond the healthcare may be remedied. The gaps that have the potential of weakening the system may be revived and switch it into a positive experience.

## Chapter 4

### RESEARCH METHODOLOGY

In this chapter details of the current pilot study that support the groundwork in the research project is presented. The context of the objectives of the study is included, necessary in carrying out the research and to determine its importance. To further understand the study and its scope an introduction of the instrument used in collecting the data and discussion of the methodological implications on the General short-form patient experience questionnaire (GS-PEQ) are also presented. Prior to conducting the study, approval by the Norwegian Centre for Research Data (NSD) has been obtained as well as other approval committees of the study site are then discussed. With regard to the information about the study, which include the research population, sample size, and respondents' recruitment process, is also described.

#### 4.1 Research design

The investigation of patient experience was conducted as a cross-sectional *pilot study*. By utilising this type of methodological approach, the research objectives may generate and capture pertinent information and responses from the patients who have definitely experienced on-hand their emergency healthcare services in the emergency department observation unit (EDOU) through the data sources including the self-administered questionnaire obtained by surveying. Pilot study, although small-scale, attempts to create sensible and valuable information that could be very useful in conducting larger projects later on. (Thabane et al., 2010; Malmqvist et al., 2019). More often, pilot studies are underreported due to statistical outcomes or lack of clarity of the design (Malmqvist et al., 2019). However, considering the useful nature of this method, it is still suggested to apply and utilise this in order to eradicate errors for future studies, regardless of the content of the subject, and for improvement of a better high-quality researches (Thabane et al., 2010).

#### 4.2 Sampling plan

In this study, a sampling process of selecting respondents in a certain study population for investigating patient experience was provided. The plan consisted of defining the target population, determining the sample population, and selecting a suitable sampling technique (Polit & Beck, 2017, p. 250). Firstly, the present pilot study had chosen the emergency

department observation unit, which was located within the vicinity of the emergency department in Ringerike Hospital to be the target study site. Secondly, the target population of interest which were the observation patients admitted either within 24 hours or more than 24 hours had been defined according to their demographic background, and its selection criteria. These observation patients were already classified as medical, surgical, orthopaedic or gynaecological patients in the emergency department by the emergency physicians and the department coordinator before they had transferred to the emergency department observation unit.

After this sample frame had obtained, the researcher chose a sample method that would fit the study objectives. Since this is a cross-sectional *pilot study*, the researcher utilised simple random sampling technique. This was used in order to randomly select potential participants that were screened and able in accordance with the eligibility criteria organised to this study for conducting and investigating the area of patient experience, primarily focused in the emergency department observation unit. According to Polit & Beck, 2018, this type of sampling method gives the respondents an equal opportunity to participate and be selected in the research. Lastly, of total 681 observation patients admitted and registered in the emergency department observation unit during the implementation of the study, there were 100 respondents who were included to take part in the survey.

### **4.3 Target population and study site**

#### **4.3.1 Ringerike Hospital**

Ringerike Hospital is a local hospital situated in Hønefoss, Norway. It has a total land area of 2000 square metres. It is one of the hospitals' trusts in Vestre Viken. Among those hospitals in Vestre Viken region are Bærum Hospital, Drammen Hospital, Kongsberg Hospital and Hallingdal sjukestugu. The hospital was built in 1965, and is composed of approximately 900 employees. It provides health care services to around 75,000 to 100, 000 inhabitants in its regions from Hallingdal, Oppland to Modum. Ringerike Hospital provides comprehensive and different special health care services which include acute medical and surgical functions, maternal health functions, dialysis, and psychiatry. In addition, the hospital is composed of various specialists from different clinical areas of specialty such as cardiology, oncology, internal medicine, gastro enterological surgery and urology,

orthopaedics, general surgery. It also has polyclinics which cover a wide variety of injuries and diseases as well as outpatient clinics for gynecological and pediatric patients.

In terms of emergency healthcare services, Ringerike Hospital has an emergency department (ED) that accommodates patients, including trauma patients who are in need of emergency or immediate help. Once the acute patients arrived in the emergency department, they will be sorted out through triaging by experienced emergency nurses in accordance with the degree of their clinical condition's urgency. It has several rooms wherein each emergency patients are assigned upon arrival, and being attended by the emergency physicians and nurses for immediate care and treatment. The emergency department comprises of three subareas within its vicinity. These are the *main receiving area* of the emergency department that accommodate different types of patients with diverse emergency conditions from young to adult, the *acute polyclinic* intended for patients with acute orthopaedic injuries which require immediate assessment for surgery, as well as other cases for gynaecological and paediatric emergency patients.

Lastly, the *emergency department observation unit* serves as a temporary unit for non-critical emergency patients. It is composed of 7 beds for observation. Patients with non-critical status, who were already treated in the main emergency department, and diagnosed by the emergency physicians may be transferred in this annex temporarily. Groups that are being sent here vary from medicine, surgical, orthopaedic to gynaecological cases. These patients are required for more observation, follow-up, and additional treatment following their potential discharge or transfer to other hospital departments for more intensive treatment coordination based on physicians' evaluation and recommendation. Within this emergency department observation unit, they will be received by the experienced nurse as well. Approximate duration of stay in this observation unit is 24-48 hours.

#### **4.4 Eligibility criteria**

The patients' categories were composed of diverse group of patients with various types of clinical conditions. These patients went, mainly, through the emergency department due to illness or injury, and received necessary treatment and care by the healthcare personnel such as physicians and nurses. This prompted eligibility as to patients need admission or not to the emergency department observation unit. However, to provide extended monitoring, care and comprehensive reassessment of patients' health status which could not be performed during a

short stay in the emergency department, patients were advised or referred by the emergency department physicians for admission to emergency department observation unit within 24 to 48 hours. This led to either discharged home or transfer to another department within the hospital for further treatment after physician's reassessment and recommendation.

The inclusion/exclusion criteria for all participants were as follows;

i.	Over 18 years of age, mentally competent and is able or willing to sign and give their written consent.
ii.	Patients stayed within 24 to 48 hours in the emergency department observation unit (medical, surgical, orthopaedic, gynaecological patients with acute health conditions)
iii.	Able to read, write and speak Norwegian language
iv.	Prior to admission in the emergency department observation unit, patients were already screened, tested negative and free from Covid-19

Meanwhile, patients were excluded if they were critically ill, patients who were victims of physical or sexual assault, medical diagnosis of abortion, unconscious, in police or protective custody. These groups were carefully excluded because they might present additional characteristics that could negatively impact the data inaccuracy and result as well as safety and ethical consideration. The emergency physicians are in-charge of evaluation and expert clinical decision whether to include or exclude the acute patients in line with the patients' severity of condition before transporting to the emergency department observation unit for further observations and clinical treatments required.

Additionally, following the legal approvals and preparation of the study, the questionnaires were distributed to the participants who were eligible by the staff nurses assigned in the emergency department observation unit. Instructions to the patients, both verbal and written, regarding on filling-up and returning the answered questionnaire were provided (See appendix H). The survey took place before the patients had been discharged or transferred to other hospital departments. It took approximately 10-15 minutes to accomplish the survey. During this phase, the data were distributed and collected on a daily basis regardless of work schedule such as morning, afternoon and night shift. The collection of data took approximately 8 weeks from September – October 2020.

## **4.5 Sample size**

According to Billingham et al (2013), there is a limited publication that could justify the sample size determination in conducting pilot studies. In addition, sample size justification is necessary to maintain the integrity and quality of the research, as well as meeting the objectives of pilot studies. Despite the limitations of sample size determination in a pilot study, there are a number of recommendations that may justify sample size (Johanson & Brooks, 2009).

Johanson & Brooks (2009) have recommended that a sample size of 100 participants could be reasonable in piloting a survey instrument. In this current pilot study, total sample of 100 respondents were enabled to be recruited to participate in the pilot study of patient perceived experiences in the emergency department observation unit using the GS-PEQ survey instrument. Larger sample size, however, provides better precision and reliable results of conducting major and extensive studies (Johanson & Brooks, 2009).

## **4.6 Implementing the actual pilot testing**

In this study, the generic short-form patient experience questionnaire (GS-PEQ) was distributed to 105 patients admitted to the emergency department observation unit in Vestre Viken in Norway. Of the 105 patients, 3 questionnaires had been returned unanswered and 102 questionnaires were completely answered and returned. Only 100 respondents were included in the study. There were no missing data. The pilot test was conducted to ensure that the survey instrument was adaptable, to examine its usefulness necessary for larger scale studies based from the size of the sample included in this present study, and whether the questions were appropriate and understandable for patients when doing future clinical and/or academical research in this specialised and particular area in the hospital – the emergency department observation unit.

In addition, an overall patient experience evaluation was included. This has been incorporated and included in the GS-PEQ instrument in order to determine the overall effectiveness of the healthcare services rendered to patients in the emergency department observation unit. It is, indeed, important to investigate this as this may serve as an additional basis for depicting the quality of healthcare services aside from the other factors including the

length of stay and socio-demographic characteristics that could influence the patient experience. The questionnaires that were distributed to eligible patients were self-administered, and composed of closed-ended questions from the different dimensions of patient experience. The questionnaire did not contain any personal and sensitive information.

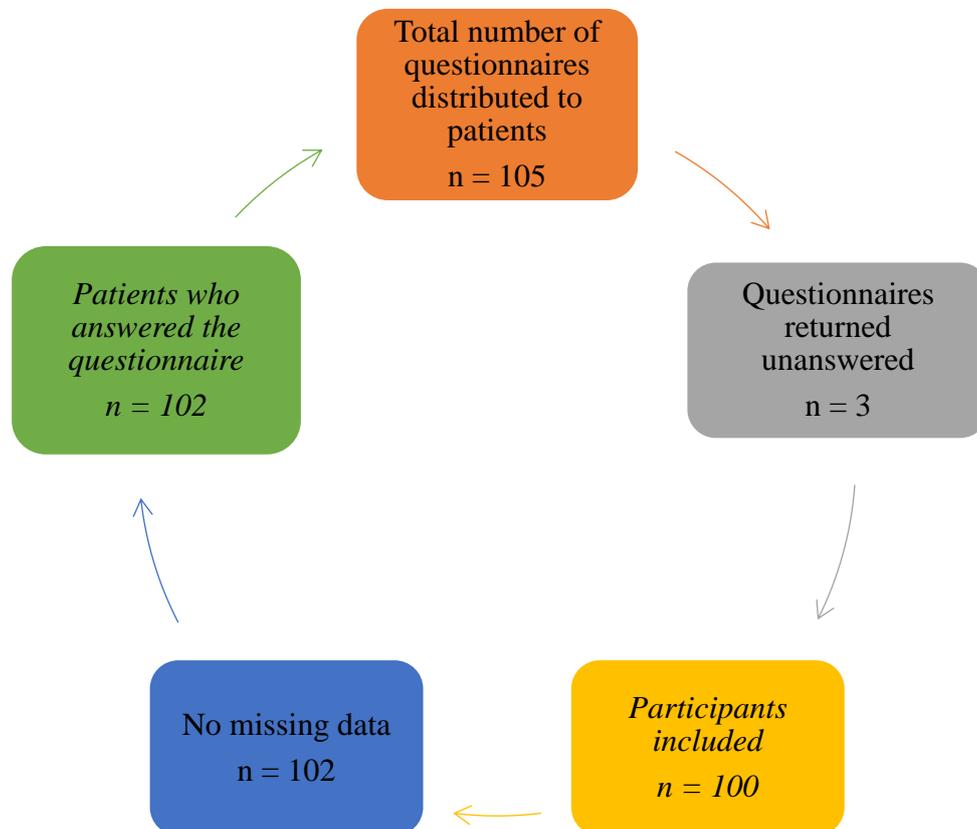


Figure 4. Flow chart for distribution and responses of participants in this study.

#### 4.7 Analysis tool

##### The GS-PEQ instrument

In this current study and in response to the recommendations of the Norwegian Health Directorate and Norwegian Institute of Public Health (NIPH) about the need for further study of patient experiences, a cross-sectional *pilot study* was performed with the purpose exploring the patient experiences of care during hospitalization using the GS-PEQ instrument in the emergency department observation unit. The Norwegian Knowledge Centre for the Health Services (NOKC) developed this short-formed standardized questionnaire based from thorough modification of different questionnaires including NORPEQ as regards to patient experiences in healthcare (Sjetne et al., 2011). According to Sjetne et al., 2011, the

questionnaire had undergone validity test in order to be understood without difficulty by the potential participants in certain studies. In addition, the purpose of modifying lengthy patient experiences questionnaires was to lessen the burden of participants and researchers. Thus, this short-form questionnaire was standardised for a more practical utilisation in conducting patient experiences' studies (Sjetne et al., 2011) (See Appendix F)

The short-form GS-PEQ questionnaire consisted of primarily 10-item generic question with 2 supplemental questions which contained relevant items for somatic inpatients experience of care and services, and applied in this present pilot study. During the process of sorting out the items to be included in the short-form generic questionnaire, certain criteria were considered. These were applicability, comprehensiveness and importance of adapting specific questions to be incorporated in the standard short-form generic survey instrument for patient experiences in various healthcare settings (Sjetne et al.,2011; FHI 2015). Although this questionnaire (GS-PEQ) has already been validated during its construction (Sjetne et al., 2011), there is still *to date* a paucity with regard to the internal consistency of this survey tool.

In terms of scoring, all items were based on Likert response scale. The initial model of the standard generic short-form patient experience questionnaire (GS-PEQ), which comprised of 12 items, was followed and there were no changes made in this study. In addition, the *overall* evaluation from the participants regarding their experiences of care and services was added. The dimensions of patient experiences in GS-PEQ instrument are as follows:

*Table 2. GS-PEQ instrument items (Sjetne et al., 2011)*

<b>Item No.</b>	<b>Item (Statement)</b>
1	Doctors' communication with the patients Did the doctors' talk to you in a way that was easy to understand?
2	Confidence in doctors' professional skills Do you have confidence in the clinician's professional skills?
3	Confidence in carers (nurses) professional skills Do you have confidence in the other staff's (nurse's) professional skills?
4	Information about the patient's diagnosis/ailments Did you get adequate information about your diagnosis/health condition?
5	Adaptation to the patient's situation Did you regard/consider the treatment as adapted to your current health situation?
6	Involvement in decision making regarding treatment

	Were you involved in decisions regarding your treatment?
7	Organization in the department Did you view/consider the hospital's work as well organised?
8	Equipment in the department Did you get the impression that the hospital equipment was in good order?
9	Patient satisfaction with health care Overall, was the care and health treatment you received at the hospital satisfactory?
10	Wrong treatment Do you think that you were in any way given inappropriate treatment (based on your own judgment?)
11	Waiting time Did you have to wait before you were admitted for further health services at the hospital?
12	Benefit Overall, what benefit have you received from the healthcare services at the hospital?

Table 3. GS-PEQ likert scale coding system.

Item No.	Statement	Not at all (Sjetne et al., 2011)	To a small extent (Sjetne et al., 2011)	To a moderate extent (Sjetne et al., 2011)	To a large extent (Sjetne et al., 2011)	To a very large extent (Sjetne et al., 2011)	Not applicable (Sjetne et al., 2011)
1	Did the doctors' talk to you in a way that was easy to understand? (Sjetne et al., 2011)						
2	Do you have confidence in the						

	clinician's professional skills?						
3	Do you have confidence in the other staff's (nurse's) professional skills?						
4	Did you get adequate information about your diagnosis/health condition?						
5	Did you regard/consider the treatment as adapted to your current health situation?						
6	Were you involved in decisions regarding your treatment?						
7	Did you view/consider the hospital's work as well organised?						
8	Did you get the impression that the hospital equipment was in good order?						
9	Overall, was the care and health treatment you received at the hospital satisfactory?						
10	Do you think that you were in any way given inappropriate						

treatment (based on your own judgment?)							
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Where, items number 1 – 9 were coded as follows,

- Not at all - 1
- To a small extent - 2
- To a moderate extent - 3
- To a large extent – 4
- To a very large extent – 5
- Not applicable - 0

Where, item number 10 was coded as follows,

- Not at all – 5
- To a small extent – 4
- To a moderate extent – 3
- To a large extent – 2
- To a very large extent – 1
- Not applicable - 0

<b>Item No.</b>	<b>Statement</b>	<b>No</b>	<b>Yes, but not for a long time</b>	<b>Yes, for some time</b>	<b>Yes, way too long</b>
11	Did you have to wait before you were admitted for further health services at the hospital?				

Where, item number 11 was coded as follows,

- No – 4
- Yes, but not for a long time – 3
- Yes, for some time – 2
- Yes, way too long – 1

<b>Item No.</b>	<b>Statement</b>	<b>Not important</b> (Sjetne et al., 2011)	<b>Little important</b>	<b>Important</b>	<b>Very important</b>	<b>Of utmost importance</b>	<b>Not applicable</b>
12	Overall, what benefit have you received from the healthcare services at the hospital?						

Where, item number 12 was coded as follows,

- Not important – 1
- Little important – 2
- Important – 3
- Very important – 4
- Of utmost importance – 5
- Not applicable – 0

Table 4. Overall patient experience assessment coding system

Overall assessment	Poor	Fair	Good	Very good	Excellent
What are your experiences with the emergency department observation unit during your stay?					

Where, overall assessment was coded,

Poor – 1

Fair – 2

Good – 3

Very good – 4

Excellent - 5

In this study, the questionnaire was supplemented with variables that pertained to general information. The following background information included were: sex, age, time of visit, educational level and the patients' length of stay in the emergency department (ER) observation unit. This was paramount in order to evaluate the quality of healthcare and services received and experienced by the respondents.

The survey instrument was designed for independent use or in combination with other survey tools to determine the experiences of patients in line with different healthcare activities they received during hospitalisation (Sjetne et al.,2011).

#### 4.8 Reliability

In this regard, the usefulness of the GS-PEQ survey instrument was measured in order to assess the internal consistency (reliability) in this particular chosen area of study. Through testing the consistency of the aforementioned questionnaire, there would be a greater likelihood to conduct the study using this standard and generic survey tool. Normally, the recommended value for the reliability of Cronbach alpha was more than 0,70 (> 0,70). On the other hand, Taber (2017) pointed also out that values 0.7 or 0.6 were acceptable. To date, there were no known studies that have attempted to evaluate the internal consistency of the standard generic short-form patient experience questionnaire.

This study acquired a cronbach's alpha of 0.621. With this, all items such as the dependent components were tested and evaluated. Since the result of the instrument's reliability was within the acceptable threshold, it was possible to commence the research. The table shows the Cronbach's alpha (a) result;

*Table 5. Reliability test*

<b>Internal consistency/Cronbach's alpha (a)</b>	<b>No. of Items</b>
0.621	12

This was analysed in the SPSS 27 software platform as well.

#### **4.9 Statistical data analyses**

To analyse the data, the software application used was the new version of SPSS 27. The collected data from the questionnaires were coded and registered immediately through Excel spreadsheet. Following the collection of data, the Excel worksheet was utilised without any access from the Internet to avoid any bias, ethical misconduct of the research, and maintaining the integrity and credibility of data and safety of respondents.

The current study employs descriptive statistics in order to analyse the variables that were included. According to Polit & Beck, 2017, descriptive statistics summarises certain characteristics of a given set of data which represents the sample of the population. Through descriptive statistics, the benefit of this approach is that the result of the data that have been collected, measured and analysed could be clearly described and interpreted in a more meaningful manner, and help the researcher summarise and reach conclusions based from the patterns it has revealed (Polit & Beck, 2017).

In terms of significance level, the analysis would be taken as 5%. This was included on all the analyses in order to facilitate statistical decision for accepting or rejecting hypotheses in this study. In order to examine the strength of the evidence, the level of significance (0.05) was considered statistically significant ( $p < 0.05$ ) in this research. With this value, this could be determined if there is an indication of the presence of association between two variables mentioned (Polit & Beck, 2018, p. 241-242).

### **4.9.1 Descriptive statistics**

In this descriptive approach, the analyses were composed of the frequency and central tendency were utilised. The central tendency consists of the most basic elements including the mean, median and mode, whilst variability determines whether the distribution of variables is normal or skewed. Cross tabulation represents and analyses the results of the independent and dependent variables as well as shows and evaluate if there is any association between these variables in a data (Polit & Beck, 2017).

During the process, certain variables were taken into account. To begin with, the frequency distribution of the study participants was presented in order to summarise and interpret the data. Here, the independent variables were the sex, age, educational level, time of hospital stay and the overall patient experience. The sex was classified into male and female. The age was categorised in 5 groups. The educational level was grouped into 12 years education and less than 12 years. The years of education was based on the Norwegian education system. While the dependent variable was the length of stay, the length of stay was grouped into two subcategories, 24-hour stay and more than 24-hour stay. Then, the independent variables were then analysed with Pearson chi-square test to determine the differences in the distribution with regard to the patients' length of stay in the emergency department observation unit

Since this pilot study had used Likert-scale and contained ordinal data, non-parametric test as well as the central tendencies such as the median and mode were utilised (Pallant, 2020 p.221-225). In addition, the range was also incorporated for measurement. According to Sullivan & Artino, 2013, the use of means in the analysis of a Likert-scale may have little importance since the ordering of responses is in ordinal. Median measures and represents the value that lies within the middle or the most inner part among the computed scores in a distribution. Meanwhile, the mode is the computed value which appears as the most evident and frequently in a given set of data (Polit & Beck, 2018).

### **4.9.2 Inferential statistics**

#### ***4.9.2.1 Bivariate analysis***

Furthermore, in order to determine inference whether the association actually exists between the patient experience and the patients' length of stay in the emergency department observation unit, *single item score* of the 12 dimensions of patient experience from the

standard generic short-form questionnaire was examined. By using the length of stay which was again grouped into two subcategories (24 hours stay and more than 24 hours) as the main dependent variable and the basis in the analysis, this got the opportunity to test the association between variables (independent variables). Pearson chi-square test for independence, as non-parametric, was examined as well as the median, mode, and range. By adapting the cross-tabulation approach in this part of the analysis, it can be clearly seen the differences in each variable in terms of the association or its independence from one another. To be able to determine its significance, categorical variables had been used which was widely recommended in the research arena (Field, 2013).

In this process, each of the independent variables which were the 12 dimensions of patient experience were cross tabulated, tested and analysed one by one with the length of stay. The 12 dimensions, as the independent variables, were identified as the doctor's communication with the patients, confidence in doctor's professional skills, confidence in carer's (nurse's) professional skills, patient's diagnosis information, patient's situation adaptation, involvement in decision making regarding treatment, organisation, equipment, patient satisfaction with healthcare, wrong treatment, waiting time and benefit.

#### ***4.9.2.2 Multivariate analysis***

The multiple linear regression was also used as a method to analyse and determine the strength of relationship among variables (Polit & Beck, 2018). The practical advantage of using this multiple linear regression approach is that it could be used to measure and analyse two or more independent variables versus the dependent factor(s) in order to determine the association of these variables (Polit & Beck, 2018). Since all the variables were included and controlled at the same time, the standard multiple linear regression analysis was applied in this study. The following variables, which were measured and assessed, were as follows: *total sum score* of the 12 dimensions of patient experience and the socio-demographic information such as the sex, age, educational level, as well as time of hospital visit and the patients' length of stay in the emergency department observation unit.

Since the variables were nominal which consisted of more than two categories, dummy variables were also created in order to make multiple regression analysis valid. Dummy variables then made it possible by creating binary variable. In order to analyse these variables, it is necessary to have a reference group to prevent redundancy in the result. For the age group, there were 5 categories and the reference that was chosen was 18-35 years. This meant

that the reference group was not included in analysing the data. The same principle was applied in the category time of hospital visit, but the reference group for this group was morning shift (7-15).

In addition, the residuals had also been assessed. This had been tested in order to better understand and to address the possibility of the variables were distributed normally. If the test revealed normal, then model predictions were also valid (Pallant, 2020 p. 163-166). Tables were utilised to present the information acquired from the analysis.

Moreover, in conducting a linear regression analysis, it has been postulated that the distribution of measured (dependent) variables is symmetrical. According to Pallant (2020) normality in the form of a bell-shaped curve, which is also symmetrical, is capable of depicting the greatest frequency of percentages or scores in the middle part and to the smallest frequencies.

In order to determine if the measured variables are evenly distributed, a test of normality was conducted with the use of Kolmogorov-Smirnov and Shapiro Wilk in SPSS (Pallant, 2020 p. 64-65). This test is an approach that could determine whether the histogram was skewed or within its acceptable norm. Total sum score was the representation of the 12 items in the generic-short patient experience questionnaire. It can be seen that the mean score of the histogram was 48.1 which was almost in the same level as the median score of 49. (See appendix J).

In terms of normality in residuals constant variance, it is also crucial to evaluate whether the assumption has been met or insignificant in regression models. To find out if this assumption is valid, a scatterplot of standardised residuals versus standardised predicted values can be scrutinised using SPSS. Normally, presence of scattered dots from different angles is visible in the box. This is known as homoscedascity. Since there is a randomly scattered dots in this case, it is likely that the homoscedascity' assumption has been achieved. In addition, it is apparent that the distribution in the histogram is symmetrical and normal which may indicate that the value of zero 0 is almost near. From here, the probability plot is also capable of detecting if there is any skewness that may necessitate to halting the normality of the distribution. In this case, the normality of the residuals was again validated through Kolmogorov-Smirnov and Shapiro Wilk approach. Although there were some small deviations in the line, this did not affect the normality of the distribution (See appendix K).

#### 4.10 Ethical considerations

This current pilot study was conducted in line with Helsinki declaration (2018) which was bound to protect the welfare and safety of the participants on all the ethical principles involved. According to lov om pasient-og brukerrettigheter, 1999, patients have their rights to be safeguarded, and give their lawful permission prior to any legal healthcare activities they are going to engaged in. By abiding to professional standards, the researcher had taken into account and utilised the important ethical principles in conducting the whole research process.

The main research ethics that had been applied were the principles of autonomy, beneficence and nonmaleficence since these are the most actual and applicable in this study (Varkey, 2020). It is indeed expected that in any research activities that the involved parties including the researcher and other team are obliged to do good toward the study participants, and the activities should not result to health disparities that may eventually harm the research participants. Therefore, regulations and guidelines should be met before proceeding to the actual research activities (Varkey, 2020)

Based from the aforementioned ethical principles applied in this study, there are five fundamental and critical principles that have played important roles (Varkey, 2020). Firstly, minimise the risk of harm. Since the present study entailed emergency or acute patients admitted in the emergency department observation unit, it is the researcher's duty as a student researcher not to cause any harm to the participants. Thus, ensuring that the activity is of legal intention, the researcher had obtained respondents' permission to participate by providing them an *informed consent* (See appendix E).

According to Dalland, 2012, an informed consent is a legal written document where it contains very important information including the intention, benefits, risks, competence of the participants' involvement regarding a specific study that will be performing by the professional clinical or academic researchers. It was also stated in the informed consent that the research was voluntary and that the patients can refuse any time without causing any harm to them. Thus, providing an informed consent is the second principle that is crucial in maintaining the safety of the participants (Dalland, 2012).

Thirdly, the principle of anonymity. As part of the ethical principle of autonomy, being anonymous is particularly important when participating in studies (Varkey, 2020). However, anonymity does not apply in all research activities, specially when dealing with very important health interventions that may deem legally helpful for others. In this study, the principle of anonymity was applied. It was stated in the information that the participants had received that once they participated and signed, their information would be considered confidential. This means that their names, birth of date, and other pertinent details would not be disclosed to anyone who was not involved in the research activities. Also, the respondents in this study were also informed that the questionnaires that they had answered would be placed in a safe and locked cabinet near the vicinity of the department, and otherwise be destroyed after the data had been registered to software and analysed.

Fourthly, avoiding deceptive practices (Varkey, 2020). Following the Norwegian Centre for Research Data (NSD)'s approval of the protocol, they had suggested that the researcher might not be directly involved in the conduction of the survey, and distribution of the questionnaires within the timeframe mentioned on the protocol. This was to avoid bias in actual research activity. Since the researcher was also employed and working at the same study site, the distribution of the questionnaires was commenced by the other staff nurses working in that facility. This was also written on the NSD's recommendation that the other staff should distribute the survey tool on behalf of the researcher. Lastly, the last principle was the patients' right to withdraw any time from the study. This principle was already mentioned and incorporated in the previous principle on obtaining informed consent (Varkey, 2020).

Furthermore, the short-form questionnaire did not contain any sensitive information that would cause discomfort to participants' safety and privacy. The GS-PEQ survey tool is a validated and standard short-form tool that was organised and created in accordance with the Norwegian Knowledge Centre for the Health Services (NOKC). Since most of the questionnaires were lengthy and time consuming, it had been decided to scrutinise some of them and chose important questions from different validated and established questionnaires to form the 12 dimensions of patient experience (Sjetne, et al., 2011). In addition, to preserve the safety and integrity of the patients, the answered questionnaires were destroyed by shredding after it had been coded and registered to Excel worksheet.

Before starting the study, the clearance was requested and granted from the research approval committee for further review and assessment. Then, the Norwegian Centre for Research Data (NSD), governing body for research approvals in Norway, gave their consent

to commence the study (See Appendix A). The proposal was also approved by the data protection officer (Personvernombud) of the study site. In addition, the involved health personnel in the department such as the nurse supervisor, chief department head and research department head of the hospital also gave their approval to the study (See appendix B). Below shows the flow and levels of approval prior to conducting the current pilot study.

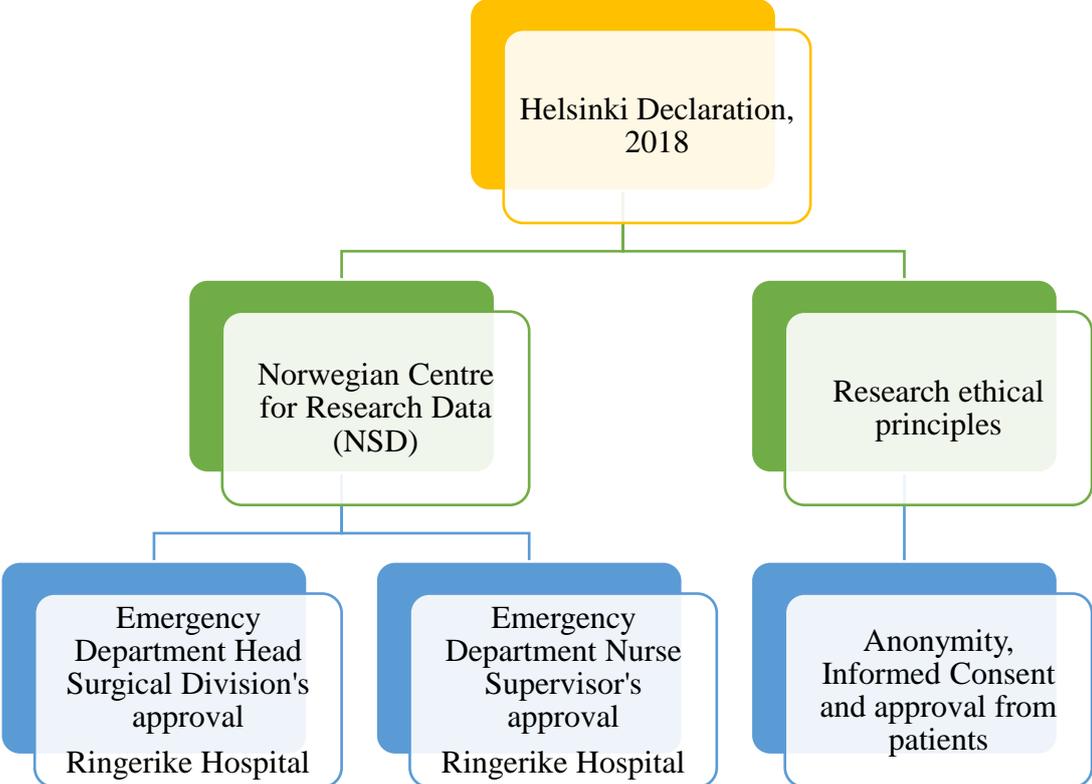


Figure 5. Present pilot study’s stages of approval from departments’ heads.

## **Chapter 5**

### **RESULTS**

#### **5.1 Introduction**

This section represents both the descriptive and inferential statistical outcomes from the research. An overview of the research population and sample is featured. The frequency of overall patient experience is also represented. Also, the next section presents the descriptive characteristics of the general short-form patient experience questionnaire (GS-PEQ), and emphasises the comparison between the length of stay in the area of study. Lastly, the relationship of the independent factors towards measured (dependent) variables, which compose of the 12 dimensions of patient experience, is presented.

#### **5.2 The study sample and data completeness**

In the course of 8-week data collection, there were 105 eligible patients who took part with the research about their experiences of emergency healthcare services during their stay in the emergency department observation unit. Of these, 3 participants had returned the questionnaire unanswered, and 102 patients successfully completed and returned the questionnaire before their discharge or transfer to another department. The participants completed the questionnaire without discrepancies. There were no missing data. In total, *100 respondents*, who participated and completed the survey instrument, were selected. In order to gather pertinent results, these data were utilised to analyse the patients' experiences of care and services during their stay in the emergency department observation unit.

## 5.3 Descriptive statistics

### 5.3.1 The participants' characteristics

Table 6. Sex, age, educational level, time of hospital visit, and overall patient experience related to patients' length of stay in the emergency department observation unit.

Variables	Emergency Department Observation Unit (EDOU)			
	Length of Stay (LOS)			p-Value
	Study Sample (N=100)	Until 24-hour stay (n = 100)	More than 24-hour stay (n = 100)	
<b>Sex (n, %)</b>				
Female	61 (61.0)	44 (44.0)	17 (17.0)	.397
Male	39 (39.0)	25 (25.0)	14 (14.0)	
	Total: 100 (100.0)	Total: 69 (69.0)	Total: 31 (31.0)	
<b>Age (n, %)</b>				
18-35	18 (18.0)	12 (12.0)	6 (6.0)	.238
36-50	28 (28.0)	17 (17.0)	11 (11.0)	
51-65	31 (31.0)	20 (20.0)	11 (11.0)	
66-75	15 (15.0)	14 (14.0)	1 (1.0)	
76-100	8 (8.0)	6 (6.0)	2 (2.0)	
	Total: 100 (100.0)	Total: 69 (69.0)	Total: 31 (31.0)	
<b>Educational Level (n, %)</b>				
12 years of education	70 (70.0)	47 (47.0)	23 (23.0)	.540
Less than 12 years of education	30 (30.0)	22 (22.0)	8 (8.0)	
	Total: 100 (100.0)	Total: 69 (69.0)	Total: 31 (31.0)	
<b>Time of hospital visit (n, %)</b>				
Morning (7-15)	33 (33.0)	21 (21.0)	12 (12.0)	.578
Afternoon (15-23)	49 (49.0)	34 (34.0)	15 (15.0)	
Night (23-7)	18 (18.0)	14 (14.0)	4 (4.0)	
	Total: 100 (100.0)	Total: 69 (69.0)	Total: 31 (31.0)	

<b>Overall patient experience (n, %)</b>				
Excellent	29 (29.0)	25 (25.0)	4 (4.0)	.086
Very good	49 (49.0)	31 (31.0)	18 (18.0)	
Good	21 (21.0)	12 (12.0)	9 (9.0)	
Fair	1 (1.0)	1 (1.0)	0 (0.0)	
	Total: 100 (100.0)	Total: 69 (69.0)	Total: 31 (31.0)	

Table 6. displays the breakdown of study participants and details of differences in the distribution of sociodemographic variables with regard to the length of stay.

Of the 100 participants (n = 100) included in the study, the distribution of the sex of participants revealed 61% (61) were comprised of women outweighed male counterparts which was 31% (31). The proportion of female and male respondents in both their length of stay (24 hours or more) showed no remarkable difference.

As can be seen from the table above, the proportion of different age categories varied. Of the 100 (100%) patients who participated, older adults (51 – 65 years) had obtained the highest percentage by 31%, and followed by middle- aged group (36 – 50 years) which was composed of 28% (28). Meanwhile, the other categories of age displayed, 18% (18-35 years) and 15% (66-75 years), respectively. The lowest proportion, however, went to patients aged 76-100 by 8%. There was no association in the patients' length of stay and the age (p = .238).

The distribution of respondents' educational level showed that patients who had higher education obtained the highest proportion by 70% (n = 100), whilst participants who had lower education level resulted to lower percentage of 30 percent (30). The two groups did not have difference related to patients' length of stay.

In addition, the table 6. shows the distribution of patients' time of hospital visit. Among the three categories (n = 100), the afternoon visit (15-23) occupied the highest percentage by 49%. This followed by the morning shift (7-15) and nightshift (23-7), 33% (33) and 18% (18), respectively. This proportion presented no significant difference.

Lastly, what is interesting about the data in this table 6. is the *overall* patient experience in the emergency department observation unit. The highest percentage of responses indicated a *very good* impression with their emergency healthcare services experience, 49 (49%) out of 69 study participants (n = 100). Surprisingly, 1(1%) had the lowest percentage and got a fair

impression as regards with the care and services encountered. Despite of this positive experience the patients had received, the data displayed non-significance between their length of stay and the overall patient experience ( $p = .086$ ).

## 5.4 Inferential statistics

### 5.4.1 Bivariate analysis

#### 5.4.1.1 Patient experience related to length of stay in the emergency department observation unit (EDOU)

Table 7. Doctor's communication with the patients

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Did the doctors' talk to you in a way that was easy to understand?</b>						
<b>To a very large extent</b>	20(20.0 %)	5(5.0 %)	4.0	4	2	.064
<b>To a large extent</b>	23(23.0 %)	18(18.0 %)				
<b>To a moderate extent</b>	26(26.0 %)	8(8.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 7. presents clinicians' (doctors) professional engagement through communication with the patients, regardless of their stay in the emergency department unit. Most of the patients who stayed less than 24 hours in the emergency department observation unit were highly positive to their experience that the clinicians had effectively communicated and talked to them regarding their admission in the facility. However, the group consisted of patients that had stayed longer (approximately 48 hours) indicated positive with their experience that physicians had interacted and talked to them regarding their condition and admission in an effective and efficient manner. Moreover, the responses, however, based on the data were not associated ( $p = .064$ ) between the doctor's communication with the patients and the length of stay.

Table 8. Confidence in doctor's professional skills

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Do you have confidence in the clinician's professional skills?</b>						
<b>To a very large extent</b>	42(42.0 %)	18(18.0 %)	5.0	5	2	.771
<b>To a large extent</b>	18(18.0 %)	10(10.0 %)				
<b>To a moderate extent</b>	9(9.0 %)	3(3.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

In this table 8., the data show the provision of doctors' professional skills to the patients who sought medical attention. The patients reported less negative experience in terms of their trust and confidence on the clinical performance and competence of the physicians in the emergency department observation unit. This was apparent on their stay on the observation unit within 24 hours wherein the participants had a higher positive experience on clinicians' professionalism and how they exhibited clinical competence. As per scale result, the most common responses of the respondents were "to a very large extent" with a median of 5 and a mode of 5 as well. However, this did not affect the relationship since there was no significant difference ( $p = .771$ ) on the professionalism and clinical skills versus the patients' length of stay.

Table 9. Confidence in carers' (nurse's) professional skills

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Do you have confidence in the other staff's (nurse's) professional skills?</b>						
<b>To a very large extent</b>	44(44.0 %)	19(19.0 %)	5.0	5	2	.900
<b>To a large extent</b>	22(22.0 %)	10(10.0 %)				
<b>To a moderate extent</b>	3(3.0 %)	2(2.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

As shown in the table 9., nurses (carer's) had attained a remarkably positive feedback from the patients when referred to their professional skills. Regardless of the patients' duration of stay in the emergency department observation unit, a higher score on the professionalism and nurses and other allied health care team members' clinical skills and competence had achieved, which were also a positive experience to a very large extent. Otherwise, there were only few reports (2% and 10%) about the less positive experience which the patients had encountered, and most of them had stayed for more than 24 hours in the aforementioned specialised unit. With regard to the level of significance, there were an absence of association ( $p = .900$ ) between the length of stay and confidence in nurses' and other allied health care members clinical competence and professionalism.

Table 10. Information about the patient's diagnosis

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Did you get adequate information about your diagnosis/health condition?</b>						
<b>To a very large extent</b>	27(27.0 %)	10(10.0 %)	4.0	4	5	.379
<b>To a large extent</b>	25(25.0 %)	16(16.0 %)				
<b>To a moderate extent</b>	11(11.0 %)	5(5.0 %)				
<b>To a small extent</b>	3(3.0 %)	-				
<b>Not applicable</b>	3(3.0 %)	-				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 10. depicts the importance of information the respondents had received from the doctors during their admission. In terms of this dimension of patient experience, fewer participants had experienced the lack of information about their diagnosis or treatment from the health care members. Basically, this group had stayed for less than 48 hours in the emergency department observation unit. On the other hand, higher percentage of the respondents reported positive experience when it came to information dissemination. These group of patients, who stayed for 24 hours in the same facility, found it satisfying to receive appropriate and sufficient information about their health condition from the clinicians and other healthcare team including nurses. In addition, the scale of this item got a median and mode of 4 where the response was to *a large extent*, regardless of respondents stay in the unit. The level of significance, however, between these variables – the information giving and length of stay found no association ( $p = .379$ ).

Table 11. Adaptation to patient's situation

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Did you regard/consider the treatment as adapted to your current health situation?</b>						
<b>To a very large extent</b>	27(27.0 %)	10(10.0 %)	4.0	4	5	.710
<b>To a large extent</b>	30(30.0 %)	16(16.0 %)				
<b>To a moderate extent</b>	6(6.0 %)	3(3.0 %)				
<b>To a small extent</b>	3(3.0 %)	-				
<b>Not applicable</b>	3(3.0 %)	2(2.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 11. represents patients' perception about the adaptability of their treatment to their health situation. Generally, patients had reported that they received necessary care and treatment in accordance with their current situation when they were admitted in the emergency department observation unit. Only a small portion of the sample had reported negatively about their experience that their care and treatment plan were not appropriate enough to their health condition. Again, these small portions were those patients who had stayed for more than 1 day in the unit. Additionally, there were non-critical reports by the respondents that their health situation was not applicable to their care and treatment. 3(3.0%) and 2(2.0%), respectively. Meanwhile, the median and mode of the scale were 4, wherein majority of the participants answered that their treatment was adaptable to their situation to a

large extent. Result showed, however, an absence of association between the patient's length of stay and the care and treatment's adaptation to patients' health condition ( $p = .710$ ).

*Table 12. Involvement in decision making regarding treatment*

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Were you involved in decisions regarding your treatment?</b>						
<b>Very large extent</b>	9(9.0 %)	2(2.0 %)	3.0	3	54.	.570
<b>Large extent</b>	21(21.0 %)	6(6.0 %)				
<b>Moderate extent</b>	20(20.0 %)	10(10.0 %)				
<b>Small extent</b>	6(6.0 %)	5(5.0 %)				
<b>Not at all</b>	3(3.0 %)	1(1.0 %)				
<b>Not applicable</b>	10(10.0 %)	7(7.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 12. conveys the distribution of sample regarding their involvement in the decision of their treatment. Since the data was widely distributed, both median and mode was 3. Apparently, majority of the patients, who were admitted in the emergency department observation unit showed an involvement in the decision making as regards to their care and treatment. The highest proportion of the respondents who had experienced user involvement positively were among those had just a short stay in the specialised observation unit, whilst patients who reported less positive outcome on their involvement in the treatment plan belonged to the group who had the duration of stay for more than 24 hours in the healthcare

facility. Despite of this outcome, there were still few cases who reported that their experience was not applicable. According to the data, there was no association between involvement in decision making and the patients' length of stay ( $p = .570$ ).

Table 13. Organisation in the department

Emergency Department Observation Unit (EDOU)						
GS-PEQ Items (Variables)	Length of Stay (LOS)		Median	Mode	Range	p-Value
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)				
<b>1. Did you view/consider the hospital's work as well organised?</b>						
<b>To a very large extent</b>	32(32.0 %)	10(10.0 %)	4.0	5	3	.347
<b>To a large extent</b>	25(25.0 %)	16(16.0 %)				
<b>To a moderate extent</b>	10(10.0 %)	3(3.0 %)				
<b>To a small extent</b>	2(2.0 %)	2(2.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

An inspection of the data in table 13. reveals that the respondents' perception of the emergency department observation unit's organization was promising. Despite of the differences of the group, the reports were still positive. In particular, a more positive experience of the good coordination and organised facility were reported by the participants who had just stayed short (24 hours). On the contrary, although there were only small percentage, patients had considered the institution's work as well coordinated. These group however belonged to those who stayed for at least two days in the aforementioned facility. Based on the level of significance presented, there were no association ( $p = .347$ ) between the patients' length of stay and the hospital's organisation.

Table 14. Equipment in the department

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Did you get the impression that the hospital equipment was in good order?</b>						
<b>Very large extent</b>	36(36.0 %)	12(12.0 %)	4.0	5	5	.476
<b>Large extent</b>	25(25.0 %)	16(16.0 %)				
<b>Moderate extent</b>	7(7.0 %)	3(3.0 %)				
<b>Not applicable</b>	1(1.0 %)	-				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 14. can be clearly seen that most of the respondents experienced that the institution's equipment was functioning well. Contrastingly, only few of them were less positive on their experience in terms of the hospital's equipment functionality. These individuals actually stayed in the emergency department observation unit for more than 1 day. Surprisingly, 1(1%) of the sample claimed that the equipment's function was not applicable in the institution. In the scale, the median was 4 (to a large extent), while the mode was 5 where most of the patients perceived the equipment in a good condition. There was no association between the department's equipment and the patient's length of stay ( $p = .476$ ).

Table 15. Patient satisfaction with healthcare

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Overall, was the care and health treatment you received at the hospital satisfactory?</b>						
<b>To a very large extent</b>	42(42.0 %)	11(11.0 %)	5.0	5	3	<b>.013</b>
<b>To a large extent</b>	19(19.0 %)	19(19.0 %)				
<b>To a moderate extent</b>	6(6.0 %)	1(1.0 %)				
<b>To a small extent</b>	2(2.0 %)	-				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

This table 15. is quite revealing in several ways. Unlike the other tables, there was an association between the two conditions ( $p = .013$ ). These were the patient satisfaction of healthcare services and the length of stay. Strikingly, majority of the patients reported a high level of satisfaction 42(42.0%) in accordance with the care and services they had received during the course of their stay in the emergency department observation unit. Since the patients were highly satisfied with the healthcare services they encountered, they also had an increased positive experience during hospitalisation. These individuals were admitted temporarily within 24 hours in the observation unit. Otherwise, small percentage of individuals reported less satisfaction or dissatisfied with the help and treatment they had received during their more than 24-hour stay in the department.

Table 16. Wrong treatment

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Do you think that you were in any way given inappropriate treatment (based on your own judgment/perception?)</b>						
<b>To a very large extent</b>	1(1.0 %)	-	5.0	5	5	.597
<b>To a large extent</b>	2(2.0 %)	-				
<b>To a moderate extent</b>	1(1.0 %)	-				
<b>To a small extent</b>	4(4.0 %)	4(4.0 %)				
<b>Not at all</b>	57(57.0 %)	24(24.0 %)				
<b>Not applicable</b>	4(4.0 %)	3(3.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 16. presents the patients' belief about the treatment they received. In this result, the patients' reported positively 57(57.0%) about their experience on the treatment they had received, regardless of their duration of stay in the emergency department observation unit. Most of these individuals were aware that they had neither received incorrect treatment nor wrong medicine at the time of their admission. Meanwhile, the median and mode were 5, wherein the majority expressed an absence of wrong treatment. There was no association presented between the patients' perception of the safety of the treatment and their length of stay ( $p = .597$ ).

Table 17. Waiting time

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)		Median	Mode	Range	p-Value
Until 24-hour stay (n=100)	More than 24- hour stay (n=100)					
<b>1. Did you have to wait before you were admitted for further health services at the hospital?</b>						
<b>No</b>	51(51.0 %)	28(28.0 %)	4.0	4	3	.135
<b>Yes, but not for a long time</b>	12(12.0 %)	1(1.0 %)				
<b>Yes, for some time</b>	3(3.0 %)	2(2.0 %)				
<b>Yes, way too long</b>	3(3.0 %)	-				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 17. shows the waiting time experienced by the patients before being seen by the clinicians. This is most significant for those participants who had stayed within 24 hours. On the other side, low percentage of patients reported that they had waited in order to access the healthcare services in the unit. In this scale, the median and mode were 4, which had a negative response for waiting time. According to the significance level, an association between the waiting time and the patient's length of stay was not present ( $p = .135$ ).

Table 18. Benefit

GS-PEQ Items (Variables)	Emergency Department Observation Unit (EDOU)					
	Length of Stay (LOS)					
	Until 24-hour stay (n=100)	More than 24- hour stay (n=100)	Median	Mode	Range	p-Value
<b>1. Overall, what benefit have you received from the healthcare services at the hospital?</b>						
<b>Of utmost importance</b>	19(19.0%)	2(2.0 %)	4.0	4	5	.204
<b>Very important</b>	21(21.0 %)	14(14.0 %)				
<b>Important</b>	13(13.0 %)	8(8.0 %)				
<b>Little important</b>	4(4.0 %)	1(1.0 %)				
<b>Not important</b>	1(1.0 %)	-				
<b>Not applicable</b>	11(11.0 %)	6(6.0 %)				
<b>Total</b>	69(69.0 %)	31(31.0 %)				

The table 18. illustrates the benefit that the patients experienced with care during their stay in the emergency department observation unit. It was apparent that the respondents in both groups expressed that the outcome of the healthcare services were very important for them during their stay. The data showed that 21% of the patients (n = 100) were positive of the benefits of emergency healthcare services. Despite of the positive experience encountered by most of the participants, 1(1.0%) of this reported that the benefit received at the time of admission was of little importance. However, the percentage of the patients who had experienced less benefits had not outweighed the other group with positive healthcare outcomes. Also, there was no association between the variables length of stay and the patient's benefit (p = .204).

## 5.4.2 Multivariate analysis

### 5.4.2.1 Multiple linear regression

In this section, a multiple linear regression was utilised in order to understand the effects of two variables and determine if the generated hypotheses can be accepted or disproved. This analysis was composed of the total sum score of the 12 dimensions of patient experience from each of the item of generic short form patient experience questionnaire (GS-PEQ) and the 5 explanatory variables. Through this approach, the study may be able to validate the significance of the factors, otherwise its independence from other factors concerning the patient experience. The table below illustrates the association between the socio-demographical background of the patients and their general patient experience.

*Table 19. Multiple linear regression analysis of patient experience and sociodemographic factors (N=100).*

Variables (Constant)	Unstandardised Coefficients		Standardised Coefficients		
	B	SE	Beta	p-Value	95% CI
Sex	-0.50	1.15	-0.04	.665	[-2.78, 1.78]
Age – 1 group (ref.) (years)					
36-50 (2)	-0.40	1.64	-0.03	.806	[-3.67, 2.86]
51-65 (3)	-0.80	1.61	-0.06	.621	[-4.00, 2.40]
66-75 (4)	4.23	1.90	0.27	<b>.029</b>	[0.45, 8.01]
76-100 (5)	-0.08	2.31	-0.00	.971	[-4.67, 4.51]
Educational level	-0.47	1.22	-0.03	.699	[-2.91, 1.95]
Time of hospital visit -1 group (ref.)					
Afternoon (15-23) (2)	-0.78	1.26	-0.07	.535	[-3.29, 1.72]
Night (23-7) (3)	-2.01	1.64	-0.13	.223	[-5.27, 1.24]

Length of stay	1.03	1.21	0.08	.396	[-1.37, 3.43]
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Note:

Sex coded as 1 = female, 0 = male. Educational level coded as 1 = 12 years of education, 0 = less than 12 years. Length of stay coded as 1 = until 24 hours, 0 = more than 24 hours.

Dummy variables: Age coded as Agedummy1 (18-35) (ref.), Agedummy2 (36-50), Agedummy3 (51-65), Agedummy 4 (66-75), Agedummy5 (76-100).

Dummy variables: Time of hospital visit coded as morning (7-15) (ref.), afternoon (15-23), night (23-7).

\*Relationship is significant at the .05 level

Based on the illustration of table 19. factors influenced by the overall patient experience were explored in an advanced technique in order to predict the strength of a linear relationship among the sociodemographic factors of the respondents and their patient experience.

The analysis of standard multiple regression was run with the total sum score of 12 dimensions of patient experience as the dependent variables, and the socio-demographic variables as the independent factors. What stands out from the data comparison was that, among the 5 independent variables, the older age group (66-75 years) indicated an association with the patient experience ( $B = 4.23$ ; 95% CI = 0.45, 8.01;  $p = .029$ ) compared with younger patients (36-50). (95% CI = -3.67, 2.86;  $p = .806$ ) as well as individuals who belonged to other age categories. Meanwhile, the remaining independent variables such as the sex, educational level, time of hospital visit, and length of stay found no evidence of association with regards to the patient experience ( $p > .05$ ).

In summary, the results in this chapter indicate that there is an association between the dimension of patient satisfaction and length of stay ( $p = .013$ ), and older patient group showed a remarkable difference among other age groups. The null hypotheses, therefore, on these two different indicators had been rejected at significance level of 0.05.

## Chapter 6

### DISCUSSION

This section tends to present the overall influence of *patient experience* of healthcare services with the application of survey instrument called the generic short-form patient experience questionnaire (GS-PEQ) in the emergency department observation unit (EDOU) in Ringerike Hospital in Norway. *First*, the section begins with the discussion of methodological challenges, strengths and weaknesses related to *piloting* the short-form patient experience instrument and its accompanying procedures.

*Next*, the discussion is followed by the major findings of the research questions listed below in accordance with the association of the length of stay as well as the sociodemographic background with regard to patient experience. Literature and frameworks on patient experience and its influential factors, may serve as the foundation, that contribute to deliverance of quality high-standard care and services. The findings on this present study, however, has revealed both *similarities* and *differences* with literatures. Also, this section includes the limitations of the study and recommendation in some areas for future investigation is included.

This section encompasses discussion as well as opportunities intended for succeeding research or academic studies that may support answering the following research questions;

**R1:** How does the *length of stay* associate with the dimensions of patient experience when receiving professional healthcare services in the emergency department observation unit?

**R2:** Are *sociodemographic factors* including the sex, age, educational level associated with patient experience in the emergency department observation unit?

**R3:** Is the *overall* patient experience associated with the sex, age, educational level, time of hospital visit and the length of stay when receiving professional healthcare services in the emergency department observation unit?

## 6.1 Piloting the short-form patient experience survey instrument (GS-PEQ).

Monitoring patient experience, through questionnaires, is a crucial intervention in refining the standard quality of healthcare (Beattie et al., 2015). With regard to the review of literature, little data was found to connect the usage of the GS-PEQ instrument. To my knowledge, this is the first study which have utilised the standard generic short-form questionnaire in the emergency department observation unit in Norway in order to identify and evaluate the factors that may influence the patient experience and quality of care improvement. This has been linked to the recommendation pointed out by the Norwegian Institute of Public Health (2016) that further studies on patient experience are needed to improve the delivery of health services in the Norwegian healthcare sector. Measuring patient experience is tantamount to obtain an excellent ordeal in maintaining the good reputation of any healthcare facilities whilst maintaining the productivity of extending and provision of healthcare services to the population (Sjetne et al, 2011; Jones et al, 2013).

In details, this *pilot study* aims of assessing the efficiency and effectivity of GS-PEQ survey tool for capturing the healthcare services' experience of patients who have temporarily been admitted in the emergency department observation unit for observations or clinical interventions before the patients were discharged home or warrant continuous care program in other departments. It has been believed that pilot studies are essential in research activities because of its informative features that may necessitate researchers to detect any disparities prior to conducting larger studies (Doody & Doody, 2015). Although performing a pilot study in certain disciplines, for example social science and health research, may provide a sustainable guidance in improving planned future researches, Thabane et al.2010, argued that one of the most intriguing challenges is underreporting of the results of this design.

In this current study, one of the major *highlights* of conducting this pilot study was to operationalise the usefulness of the GS-PEQ instrument, where it also focused on presenting the results whether there was an association among the variables or not obtained to raise awareness of the readers, both clinicians and academe that this short-form questionnaire is existing, and is important for monitoring the patient experience. This reflects those of Doody & Doody, 2015 who also found that a properly handled and well-endowed pilot study may result to a more productive and high-quality research activities, and provide room for education and improvement in terms of the research techniques intended for a more sophisticated and bigger projects.

Another contribution of this present pilot study is that it has applied cross-sectional as a form of research design, and specific types of statistical approaches to analyse patient perceived experience. According to Doody & Doody, 2015, effective and well-planned larger studies may require an appropriate research approach to ensure that the findings derived from the analysis are valid, and this is to avoid problems that might have caused using non-fitting techniques. In this study, descriptive statistic and inferential analysis including the regression were applied to investigate the association of the factors concerning the dimensions experienced by the patients during their hospitalisation. Although there were two factors that were associated with patient experience, for example the older patients' association with patient experience and patient satisfaction related to length of stay, one of the challenges arose with these analyses was the *indifference* of the other remaining variables.

Despite of the robustness of the research techniques utilised in this current pilot study, Malmqvist et al., 2019 have claimed that some results of a well-planned pilot studies could have inconsistencies or insufficiencies. According to Thabane et al, 2010 these might cause by the several issues. This is, for instance, *sample size*, different approaches and the lack of necessary guidelines for conducting specific pilot study which may possibly influence the results of the study (Kistin & Silverstein, 2015). However, with a small sample size, caution must be applied, as the findings might not be sufficient enough in order to achieve the desired outcomes. This study had reached the minimum sample size of 100 which was intended to test the hypotheses about the patient perceived experience in the emergency department observation unit. This result corroborates the ideas of Field (2013) who suggested that a sample of 100 is adequate in accordance with the expected effect size and at least six or less predictors. In this case, the present study had come up with 5 predictors to ensure thorough observation in evaluating the patient experience through multiple regression analysis (Field, 2013). However, it is important to note that caution must still be applied with the sample size applied in this study as it might not be sufficient and precise.

Since the ultimate interest of the current research is to capture the experiences of diverse groups of patients in the emergency department observation unit in a specific and certain period of data collection, the research design that had been utilised in this pilot study was *cross-sectional*, as highlighted in the previous argument. Polit & Beck, 2018 have purported that selecting cross-sectional type is inexpensive and economical, particularly in aiming to conduct a study in a shorter period of time. Despite of this, Tellis & Chandrasekaran, 2010 pointed out that *response bias* is still considered one of the major challenges to researchers

whenever cross-sectional approach has been applied because of the nature of non-response issues when collecting data and could influence the results.

Additionally, taking into account the response rate, it was one of the *strengths* and successful characteristics of this cross-sectional pilot study due to its completeness and almost 100% response rate during the implementation of the research, and most patients had willingly agreed to participate and answer the questionnaire because of its non-complicated, convenience and concise feature. This has been linked to Fincham's (2008) findings that as regards to the responses of participants, a rate of 60% or higher is regarded as robust.

Although the construction of the GS-PEQ has led to creation of the 12 generic core variables which could be useful in determining the weakness and gaps of the area of patient experience which originated from the PEQ and NORPEQ subdimensions, there is a *paucity* on the reliability of the questionnaire. Hence, to ensure that the *internal consistency* of the GS-PEQ survey instrument may deem applicable in this current study, the reliability test had been tested before conducting and proceeding to the actual piloting of the instrument.

Since there was a lack of clarity on the presentation of the actual internal consistency (Sjetne et al., 2011) of the standard GS-PEQ during the process of constructing the GS-PEQ instrument, the present study has instead based the internal consistency's result on the PEQ cronbach's alpha coefficient level. Arguably, Ursachi, Horodnic & Zait, 2015; Taber 2017 have outlined that an internal consistency level of 0.6 to 0.7 could be considered as acceptable. One interesting finding is that there are only few published researches detected as evidence for adapting the GS-PEQ survey instruments as a standalone approach, and these studies have just incorporated the GS-PEQ as a supplemental questionnaire in targeting their research objectives (Wählberg et al., 2016, Solberg et al., 2019, Hilt et al., 2020).

Since the validity test was already conducted during the construction of this questionnaire, it was not performed in this present study. The generation of validity assessment previously, for example somatic and psychiatry departments, was opted to be the *strength* of this survey tool (Sjetne et al., 2011). Through the result of the internal consistency of the survey instrument, it is of opinion that the lack of reliability assessment from previous study (Sjetne et al., 2011) is considered the *weakness* of this instrument, and there are still some areas for improvement in future researches. However, *to date*, there is no evidence of scientific publications that could have been provided further tests and evaluated the internal consistency of the GS-PEQ survey instrument.

In this current small-scale pilot study, the standard GS-PEQ was used and piloted *independently*. According to Sjetne et al, 2011, this validated non-lengthy questionnaire could be used in research or academic purposes as a self-contained instrument or as supplemental survey instrument for conducting researches in the view of determining gaps in quality healthcare services improvement. Since the response rate of the questionnaire was high in this study, there were also an *absence of missing variables* at the time of data analysis. It is encouraging to compare this finding with that found by Rolstad et al., 2011 who found that participants have tendencies facing difficulties, for instance patients handed down the instrument with series of questions related to clinical studies, in accomplishing lengthy survey instruments.

Thus, this may lead to an increase in discomfort for those who are about to answer and may possibly result to either decrease in responses or partial response and missing data (Rolstad et al., 2011). However, although psychometric properties may influence the shortened questionnaires due to unidimensional feature, Sahlqvist et al., 2011 argued that participants showed more interests in accomplishing non-lengthy survey instruments, and this led to a more positive and an incline in the response rate in terms of survey form completion.

In terms of the healthcare services evaluation, survey timing, and distribution of questionnaires, Bjertnaes, 2012 underlined that there were no specific times on how to properly conduct and distribute the patient experience questionnaires in the hospital. However, in this study the regular shifting schedules (morning, afternoon, night shift) of the hospital had been followed in order to identify which working shift contains the highest or lowest patient admission in the emergency department since this may influence the number of patient admissions in the emergency department observation unit in the present study site. Furthermore, the actual questionnaire distribution was performed prior to discharge or transfer. According to Chiu et al., 2014, conducting patient experience evaluation through appropriate timing such as during discharge for the patients may have an equal opportunity to collect and evaluate their experiences in the emergency department.

Additionally, the staff nurses who were assigned in the emergency department observation unit had the responsibility of distributing the questionnaires to the patients. This regulation had been followed by the researcher in accordance with the decision of the Norwegian Centre for Research Data (NSD), wherein the researcher was advised not to be directly involved in the distribution of the questionnaire to avoid any ethical issues. The highest percentage (49%) of acute patient visit was in the afternoon shift (15-23) in this study.

Similarly, Lateef, 2011 had explained that shifting is one of the most challenging times in the emergency department, and this may greatly affect the experiences of the patient with regard of their care and services they are receiving. As such, patient who are already in the emergency department are expecting that they will receive appropriate care and services on their acute health care needs. When the care and services are delayed, the emergency patients may experience high anxiety and stress level. Thus, may result to dissatisfaction in the healthcare care facility and healthcare personnel (Lateef, 2011).

As mentioned in the literature review, the standardised generic short-form patient experience questionnaire (GS-PEQ) contains specific and important factors that is specifically build for monitoring and measuring the progression of the healthcare services (Sjetne et al., 2011). Aside from its reasonable and unique features such as non-lengthy and convenient for respondents who are capable of participating in academical or clinical researches, the GS-PEQ instrument consists of items which may directly address the issues of patient experience (Wählberg et al., 2016; Hilt et al., 2020).

Moreover, it is interesting to note that the 12 items in this standard short-form questionnaire and the quality of healthcare delivery services have evolved from 7 different areas of patient experiences that have been considered critical in ways that could eventually result to the refinement of the health care system (Wolf et al, 2014). Thus, taking into consideration the fact that without these factors such as the healthcare outcomes, patient-centred care demonstrated by the health care personnel, patient involvement, monitoring of incorrect treatment, information, organisation and accessibility, it may be challenging for the health care system to improve their health care services. (Wiig et al., 2013).

Finally, based on the experiences acquired whilst implementing this first cross-sectional pilot study, this concludes that several strong points outweighed the challenges faced during the research process. However, some limitations to this pilot study still need to be acknowledged. This study had an opportunity to integrate modelling approaches intended to evaluate the robustness of the standard short-form questionnaire and piloting its conciseness. Also, the importance of selecting appropriate research design which is essential in detecting disparities of the method to ensure a more improved and high-quality future larger studies about patient experience in the emergency department observation unit (EDOU).

## 6.2 Patient experience and length of stay

According to a systemic review conducted by Galipeau et al., (2015) the length of stay should also be acknowledged as an indicator of the short stay units' effectiveness in delivering quality healthcare and satisfaction to patients' experience. Dealing with this in a generalised and comprehensive manner is considered important (Baugh, Venkatas & Bohan, 2011; Manary et al., 2013). With regard to the second research question, it was found that most of the domains of patient perceived experience are not significant. In this present study, among the 12 essential dimensions of healthcare (11 out of 12), 11 of them *were found no significant difference* between the patient experience and their length of stay at the 0.05 significance level.

These 11 dimensions were doctors' communication with the patients, confidence in doctors' professional skills, confidence in nurses'/carer's professional skills, information about the patients' diagnosis, adaptation to patients' situation, involvement in decision making regarding treatment, organisation in the department, equipment in the department, wrong treatment, waiting time and benefit.

Remarkably, the most clinically relevant finding to emerge from the analysis is that the dimension of *patient satisfaction* ( $p = .013$ ) revealed *an association* on their length of stay (LOS). Among the two groups (until 24-hour stay versus more than 24-hour stay), this revealed that patients who have stayed within 24 hours (69%) were more satisfied with their experiences with the healthcare providers and the care and services they have received. This value mirrors and is consistent with previous cross-sectional study by Binsalih et al., (2011) that have examined experience of the patients during their period of hospitalisation. In accordance with the present result on this dimension, Vermeulen et al., 2015 have underlined that monitoring patient experience during their stay could be a useful indicator of improving the healthcare services and the lesser they stay in the hospital unit the greater the chance of their satisfaction to the healthcare system as it leads to greater and better positive outcomes and experience (Borghans et al., 2012).

As part of the main essential domains in the area of patient experience in this study, according to Baugh et al., 2011, the patient satisfaction could also impose a major and biggest factor in the quality improvement than the rest of the variables that were included. On that account, the finding of this study suggests that observation patients were satisfied with their

experience as regards to the necessary information they have received during the course of their stay in the emergency department observation unit (EDOU). Since patient satisfaction is considered subjective, this could mean that there are individual differences on how each patient may actually expect and perceive their care from the healthcare providers (Sagi et al., 2016). Additionally, the result could be indicated by the fact that Blackburn et al., 2019 have argued that the experiences of patients are highly focused on everyday communication and information giving, and patients who are under the care, observation and treatment of healthcare providers are completely dependent on the professional advices and update of the healthcare team (Blackburn et al., 2019).

Further, Sagi et al., 2016 emphasised the value of information dissemination among the members of the healthcare team including the physicians and nurses as this is very important in maintaining the safety, positive experience and satisfaction of patients, regardless of the duration of patient stay in the hospital and the clinical tasks the healthcare providers are obliged to in a fast-paced clinical environment. Moreover, in order to avoid confusion and anxiety, Milutinovic et al., 2012 have purported that communicating thoroughly and appropriately with the patients should be taken into consideration, and elaborating to them the procedures, care, and processes they are going through carefully.

With the lack of communication, gaps may certainly break the positive experience and create dissatisfaction among patients in the observation unit, and this may eventually just contribute to the confusion and frustrations of the patients as well as may cause uncertainty and fear of the unknown because they did not receive enough explanations about the preparation and what they are going to undergo in the midst of their hospitalisation (Ng et al, 2009; Milutinovic et al., 2012). In contrast, in this current study, the patients had neither expressed fear nor anxiety because of the scarcity of information that they were expecting from their care providers. Once the patients are properly informed of the care and treatment, their trust and satisfaction to the healthcare providers will be established and increased. Fiorio, Gorli & Verzillo, 2018 have pointed out that this may also reflect the governance of the hospitals on how well they train, prepare and following -up their staff to consistently and effectively render the healthcare services the patients deserved with competence and with good standards.

According to a retrospective cohort study by Ackroyd-Stolarz et al., 2011, the perceptions of the patients during their stay are as important as how the healthcare providers deliver their care and services to the people. For example, in this study the high percentage (69%) of the

participants responding to the overall care and treatment they have received during their short period of stay highlight that they are highly satisfied with how the providers give their care and treat them. Although there are still factors behind that may deem negative and mishaps to the patients during their stay, this is in good agreement with Napolitano & Saini, (2014); Dada & Sule, (2019) that the professionalism of the healthcare providers did not break the consistency of performing their responsibilities to render quality care which yield positive outcomes, and the patients still considered this experience in a positive way.

Another possible explanation to this result is that the staff such as clinicians and nurses have attended to the patients' healthcare needs consistently (Napolitano & Saini, 2014). In this hospital where the study has conducted, the potential observation candidates are being instructed and informed by the clinicians that they are being sent to the emergency observation unit observation unit for further diagnostics and observation of their condition, although not necessarily to be admitted in the regular wards. From this point, the patients already have the knowledge what they are going to go through throughout the period of their stay and expectations of the care and treatment are already present.

This corresponds to Entwistle et al., 2010; Quin et al., 2017 that the notion of organising the system and acknowledging the patients with their participation is a gateway to meeting their expectations and increasing patients' compliance, participation and knowledge of their condition. With respect to this, the healthcare providers are aware that their patients have their expectations to them and the system. In turn, the providers are extending their competence and skills professionally by delivering them the most safety practice they could (Doyle et al., 2012).

However, in contradiction to these arguments, there may be some aspects that may deem negative for the patients when their expectation of the healthcare services has not been met (Cleary, 2016; Prang et al., 2019; Karaca & Durna, 2019). Since the emergency department observation is directly annexed to the main emergency department in this study, there may rise potential disadvantages in terms of high standard quality patient care. To illustrate, possible delays and abrupt procedures in the care and treatment of the patients who stay in the emergency department observation unit may also occur as the clinicians, nurses and other healthcare members have a variety of tasks both in the emergency department and the observation unit (Lucas et al., 2009; Mahsanlar et al., 2014; Baek et al., 2018)

In addition, in this study, the finding of the length of stay for more than 24 hours, may be trivial as this could also be a factor on the delay of treatment that is why some of them stay for more than 24 hours or could be just a planned extended treatment in this area. Mahsanlar et al., 2014 argued that acknowledging this problem may also help in overcoming the negative experience of the patients in a meaningful and effective care and treatment. As delayed in healthcare services and not meeting and recognising the healthcare needs of the observation patients in a timely fashion could result to dissatisfaction on the providers' performance, poor health outcomes and health care system distrust, and most especially a reduction in the positive experience (Baek et al., 2018).

Contrary to the expectations, this present study *did not find significant difference* between the previously mentioned 11 out of 12 dependent variables of patient experience and their length of stay (LOS). What is curious about this finding is that the evidence showed that the 24-hour duration of length of stay (LOS) had a higher percentage (69%) of responses than those who stayed for more than 24 hours (31%) in the emergency department observation unit (EDOU). This means that the lesser the patients stayed in the emergency department observation unit, the more positive they are with their experiences of the care and services they are receiving from the healthcare providers. Despite of the unexpected non-significance on these dimensions, this is still somewhat useful and reasonable results.

The more positive patient experience, the higher the satisfaction the patients are with healthcare providers and the health care system (Jha, Frye & Schlimgen, 2017). The longer they stay to the emergency department observation unit, the lesser they are satisfied with their experiences of healthcare services rendered by the healthcare team. It is encouraging to compare this study with that found by Sullivan et al., (2017) & Yong et al., (2011) who found that the length of stay experienced by the patients in accordance with the care and treatment is an important aspect in healthcare that should be monitored closely to determine possible solutions to improve quality of healthcare services.

These rather intriguing findings could be attributed to a number of pertinent aspects. Firstly, the analysis of the study has pointed out the *professional care aspect*. The patients could have been treated by the emergency department observation unit staff with courtesy and respect. This study supports evidence from clinical observations (Soleimanpour et al., 2011; Grocott & McSherry, 2018) that showing patients these factors may increase their satisfaction level toward the healthcare providers. Additionally, only a relatively low percentage (31%) of patients experienced healthcare disparities during the respondents' length of stay (LOS) in the

emergency department observation unit in this research. This result corresponds with previous studies, which outlined that shortened length of stay may impose better and safety care and treatment outcomes for the patients (Vermeulen et al., 2015; Andersson et al., 2020).

Regardless of proportion in this current research, this may still be interpreted that the healthcare providers certainly involve their patients in the care and services, and that they consider the patient-centred care approach as an important factor in the care and treatment process. To illustrate, in this study most of the patients expressed their confidence to the clinicians, nurses and other allied health care team to either “very large extent” or “to a very large extent” as positive response to the patient experience questionnaire. Consistent with the literature, this finding found that participants who reported using positive responses also perceive that they are being safeguarded and their healthcare needs are being addressed properly (Delaney, 2017; Holt, 2018). Also, similar to the review conducted by Borghans et al., 2012 it was expressed that better satisfaction experienced by the patients during their stay could be an indication that they have received a good coordination of care.

Secondly, another obvious finding to emerge from the analysis is that the *physical and technical care aspect* plays also an important role. Facilitating a safe and pleasant environment within the premises of the healthcare facilities is substantial (Pomare et al., 2019). Since the patients are actually staying in the emergency department observation unit for either 24 hours or more under observation and further diagnostic interventions, it is assumed that these patients are anticipating that they will be treated safely and be assigned in unit or room wherein they can have the feeling of comfort whilst waiting for further care and services in this study.

This is, for example, when patients who have been staying in the observation unit for clinical observation are experiencing unnecessary noise, insufficient light, unregulated and unchecked room temperature. These disruptions could add to the patients’ discomfort as well, and may result to undesirable experiences toward the facility during their duration of stay (Eijkelenboom & Bluysen, 2019). It has been shown that patients are not also keen on what sort of healthcare services they are going through when they presented to the healthcare settings such as hospitals, but they also expect that the place and environment they are going to receive their healthcare services is pleasantly organised, presented and safe (Fadda, 2019). This has been supported by Manary et al., 2013 that better health outcomes are not only dependent on performing direct care aspects for the patients, but other indirect factors such as the quality and physical appearance of the room for the patients are likely to influence the

perception of their experience during hospitalisation, and this may give them an impression of satisfaction when they experience that the facility they staying are good and desirable enough.

Thirdly, *patient engagement* is another credible reason in terms of patient experience. Patients who were responded positively during their stay in the emergency department observation unit could have been involved directly throughout the duration of their stay in this study, most specially for those who remained for at least or lower than 24 hours. As they have stayed for just 24 hours during the course of their care and services, this has greatly increased their trust and confidence to the healthcare providers and the system that their health condition has not been taken for granted and being actioned and intervened at the right time at the moment they were classified as observation patients. This finding broadly supports the work of other studies in this area linking the involvement of the patients with their experiences during their hospitalisation (Davidson et al., 2016). Additionally, by acknowledging their presence as partners in care process are crucial because letting them participate in this process may deem beneficial for the healthcare team members in terms of identifying their needs and wants at the time of hospitalisation as well as the patients could probably regain their self-management which is important when recovering from illness (Jha, Frye & Schlimgen, 2017).

Involving the patients has always been considered streamline in delivering high-standard of care (Andreassen, 2005, p. 55-66). Without patients' participation in bringing the best possible outcomes, this might as well raise conflict in improving the quality of care in any healthcare sector. As such, giving the patients their right to decide and be heard of their expectations and frustrations may cut off the hurdles of unwanted patient outcomes. The result in this study corroborates the ideas of Jha et al., (2017) who argued that patients who are involved may have the opportunity to express their healthcare needs without hesitations because the healthcare system has been open to them by offering them their freedom to choose. While the healthcare providers are also open to the patients' needs and wants, and listening to their patients, the patients may absolutely be participative and empowered and may lead to lesser future admissions (Bombard et al., 2018) Thus, creating this atmosphere as such the emergency department observation unit may enhance the delivery of healthcare which may result in high-standard quality care, better outcomes, and a positive satisfaction.

However, without consistent maintenance and monitoring of the quality of healthcare may also lead to negative experience, thereby resulting to dissatisfaction of patients (Wiig et al 2013) For example, prolonged stays may possibly jeopardise the health condition of patients

and later be subjected to risk of adverse events, and could deprive patients from positively experience the realms of healthcare (Doyle et al, 2012; Harrison et al., 2016). The patients who were classified as observation patients comprised of various health concerns and diagnoses, wherein 31% of the groups had been temporarily admitted in the emergency department observation unit for more than 24 hours in this present study. A possible explanation for this might be that the clinicians have yet to decide for further clinical examinations, referrals to a more specialist hospital, or being transferred to other hospital wards as inpatients. If the patients may need to stay longer than expected planned according to his care and treatment plan, then this will also affect the patients' perception on healthcare, satisfaction and the outcome of health services (Plamann et al., 2018).

Therefore, ensuring that the patients have been provided by sufficient knowledge and correct information of their course of care and treatment during the duration of their stay is important as this may also help them cope and be aware of the current situation (Bombard et al., 2018) A trusting and efficient interactional relationship between the patients and providers should also be taken into account (Jha, Frye & Schlimgen, 2017). More so, the overall results underlined that the variables of patient experience do not associate with their length of stay.

### **6.3 Patient experience and sociodemographic**

Acknowledging the incorporation of socio-demographic factors in improving the quality of healthcare may deem necessary in finding strategies to alleviate the burden of healthcare issues (Sun et al., 2019). This way, areas for improvement could easily be detected and determined through investigating groups that may have caused disparities in healthcare which could then be corrected accordingly (Kirst et al., 2013). Although Chiu et al., 2014 had expressed the importance of socio-demographic as vehicle for evaluating patient experience in the acute care settings, there were *no significant differences* demonstrated between sociodemographic factors including the sex, age and educational level and the patient experience in the emergency department observation unit in this present regression analysis. Interestingly, the result suggests that among the *age* subgroups, the older adults' category from 66 to 75 years was the only group in the regression that had shown association ( $p = .029$ ) on patient experience compared to the younger patient groups in terms of the emergency healthcare services they have received.

Apparently, there are several possible explanations for this outcome. To begin with, although the finding revealed no association between the *sex* and patient experience in this present study, Dzomeku et al, 2013 found that there was a significant difference on the patients, in line with their sex differences, when they are receiving healthcare services and on how they are being taken care of. That is to say, according to Liu & Wang, 2007; Milutinovic et al., 2012, it has been observed that positions and roles of these two patient groups may differ during their hospitalisation wherein men are exhibiting more satisfaction levels on the healthcare services they are receiving than their female counterparts. A possible explanation for these differences might be that females are, although spending more time in bed during hospitalisation, particularly focused on their personal hygiene and being more attentive on their health status (Milutinovic et al., 2012). Furthermore, Karaca & Durna, 2019 have also outlined that women are more likely to experience and suffer from stress and anxiety due to their hospitalisation.

There are, however, other possible and added explanations. According to Karaca & Durna, 2019, during the implementation of care and services females need more privacy at the time of their stay in the hospital. When visitation of the healthcare providers is in progress and the need for examination or other clinical procedures are intended, patients are actually easily exposed and women are more susceptible to exposure, therefore, providing them privacy is indeed an important aspect for all patients, females in particular. Moreover, Teunissen et al., 2016 have emphasised that in 6 female patients there is one who has been experiencing lack of privacy. Therefore, the privacy of patients should also be taken into account (Teunissen et al., 2016). In terms of pain experience, Karaca & Durna, 2019 underlined that female patients are experiencing more chronic pain than their male counterparts. However, although it has been known to be challenging to determine the mechanism that affects the function of pain experience in line with sexes, it has been pointed out by Teunissen et al., 2016 that male and female patients have different approach on mitigating their pain experience. For instance, Bartley & Fillingim, 2013 argued that men are problem-focused, whilst the women are dependent on social support and emotion-focused approach, and report their pain experience more often than men.

Additionally, females are more socially dependent on the care and services' aspect during their hospitalisation (Karaca & Durna, 2019). This could indicate that women are more likely to expect that they will be taken cared of properly by the healthcare providers, and that their concerns may be addressed accordingly as to what they anticipate. Although a sense of value

and care are crucial for both sexes, women have higher expectations on being valued by the healthcare providers. On the contrary, in a research carried out by Sun et al., 2019, this has emphasised that men are less involved in healthcare activities compared to women who are more engaged in different aspects of healthcare activities and seek more health care behaviours more often than males.

Apart from the first mentioned socio-demographic factors, the *age* is another important characteristic in patient experience. Based on the finding, this suggests that older patients (66-75 years) presented higher satisfaction on the healthcare services they had received than the younger patients. This is in good agreement with several studies which found that older patients have exhibited more satisfaction levels compared to patients who are younger than these patient groups (Milutinovic et al.,2012). This interesting result could explain that older patients are exhibiting more respect, consideration, care and dependency for healthcare providers compared to younger groups who are less socially engaged and accepting as well as their maturity on utilising healthcare services (Williams-Roberts et al., 2018).

Notably, focused medical attention to older patients have been marked due to the fact that their health status consists of multiple chronic conditions (Hartgerink et al.,2015) Despite of the claim from some studies that older patients are more positive on their experiences, Williams-Roberts et al., 2018 stated that these patient groups may still experience unnecessary outcomes. This could have illustrated as frustration related to long waits on clinicians on consultation and educating them on their medications (Gleeson et al., 2016) Thus, this could require multiple coordination and integration from diverse group of health care team. Through this integrative approach on their care and services, they are more satisfied with services they are receiving (Buchanan et al., 2012).

On the other hand, younger patients may manifest more autonomy on their on their lives which could possibly influence their experiences on healthcare (Davey et al., 2013). Since the younger groups could have believed that they are less cognitive or psychosocial mature in utilising the healthcare services, it may pose challenges on understanding the importance of receiving necessary care and services. As such, some of them have lesser knowledge on health care system, what healthcare services they can possibly avail. According to Davey et al., 2013; Williams-Roberts 2018, it has emphasised that acknowledging and understanding the healthcare needs, regardless of their medical conditions should also be taken into account in order for the recipients of care to become more comfortable with the services, and have the opportunity to positively experience healthcare services. Additionally, support from the

healthcare providers is crucial in order for this younger groups to verbalise their needs for better care coordination, being assertive and effective decision making to better manage their health (Marshall, 2011).

Furthermore, according to Davey et al., 2013, that younger patients may have insufficient understanding on their rights as patients due to the lack of clarity and information about their privileges which may lead to dissatisfaction. If these younger patient groups are not well-informed, then they will be more reluctant on the health services offered to them despite of its availability. (Marshall, 2011). It is therefore important to educate and empower them which enable them to be better equipped with necessary knowledge in terms of the healthcare services they are receiving and increase their awareness of the treatment plans as well as improve their experience. An example for this is to educate them through disseminating leaflets and technological ways such as mails and texts which provide information about the healthcare services, their rights including the benefits they are going to receive when they have been treated specifically on their health conditions which could help gain trust on the healthcare providers and leads them to experience satisfaction of the care and services in more convenient ways. (DeVoe, Wallace, & Fryer, 2009; Van Dongen et al., 2019).

Another possible argument for this is the lack of communication (Kirst et al., 2013). Compared to older patients who possess more maturity on their healthcare, younger patients are lesser vocal on their care and services which could create uncertainty and unclear about the healthcare services they are going to experience or undergo (Davey et al., 2013). For instance, a surgical procedure may require information prior to operation, and without sufficient information giving on the part of the provider this could certainly unclear for the younger patient on what to expect. Therefore, to avoid this problem or uncertainty on the patient, suitable measures such as provision of technological advancements is a step to keep them informed or traditional approach of information dissemination on older patients (Fiorio, Gorli & Verzillo, 2018). However, regardless of their age categories, communication is pertinent on all occasions pertaining to healthcare services provision as this will help them increase their awareness. Thus, the quality of care may improve as well as increase in positive experience (Tabler et al., 2014; Entwistle et al., 2019).

Unlike other researches carried out in this area of socio-demographic, it did not find a significant difference between *educational level* (12 years or less than 12 years education) and patient experience. This corresponds to the claim provided by Goldman & Smith, 2011; Raghupathi & Raghupathi, 2020 that the degree of the individuals' education does correlate

with health in terms of their healthcare experience, wherein countries that possess higher levels of education may have an indication that they could access to better health status and opportunities. Additionally, the finding suggests that patients who have higher educational background such as 12 years of education, are more positive on their experience of healthcare compared to those group of patients who have less education (less than 12 years education), regardless of their stay in the emergency department observation unit (EDOU). The values are scarcely distinguishable from Karaca & Durna, 2017, who argued that literate patients and patients who obtained higher education levels including university or college levels are more satisfied with their healthcare experience. However, this outcome is contrary to previous studies which have demonstrated that patients who are literate, though have achieved lower levels of education including primary school levels manifest higher and greater satisfaction on healthcare experience (Milutinovic et al., 2012; Dzomeku et al., 2013).

There are several additional possible explanations for these results. First, according to Wiborg, 2009 the educational system in Norway or the other Scandinavian countries could have been different from the educational system in many other countries which may be connected to their free access to higher education. This may be of relevance when accessing the transferability of the studies to the Norwegian context. In addition, although there is some presence of social inequalities among educational groups, wherein the individuals with higher levels of education are experiencing better health than those groups who obtained lower levels of education, the Norwegian Institute of Public Health, 2018 underlined that the utilisation and rendition of healthcare services have not been hindered in improving and promoting better health services for the inhabitants. Since the individuals have the privilege to acquire free access to higher education in Norway, this may also have an influence that could make it different from any other countries, and in terms of how the people may cope with the society and their understanding on the different services they could avail (Braathe & Otterstad, 2014).

Second, the level of care and services expectations (Dzomeku et al., 2013). Since patients who obtained higher levels of education, specifically those groups with 12 years of educational level, could grasp information more easily compared to those with lower educational level, and they are expecting that the healthcare providers as well as the healthcare system would provide them more substantial services (Karaca & Durna, 2017). These patients are more critical in the care and services they are receiving as it is expected that this group are logical enough to understand the necessary information about their treatments, procedures and other clinical care coordination (Schull et al., 2010).

Third, experience on patient-centred care has been regarded as an important aspect (De Boer, Delnoij, & Rademakers et al., 2013). In this study, it could obviously be predicted that almost all patients, regardless of their levels of education have reported positive healthcare experience during their hospitalisation. Notably, 12 years of education (47%) and less than 12 years of education (22%) in this study. The variations of the healthcare experience of different patient groups in accordance with their educational attainment was little. Similarly, according to De Boer et al, 2013, it had been purported that variation of levels of education may not hinder the provision of patient-centred care. In other words, no educational inequalities may have been observed in accessing patient-centred care as all types of patients from different educational background have been involved in decision-making of their healthcare (Bombard et al., 2018).

However, this is not particularly surprising if we consider the patient-centred style of communication or interaction among individuals. According to De Boer et al., 2013 patients with lower educational attainment might have received as much information experiences as those groups with higher educational background. This is, for instance, during the clinical decision-making of their healthcare services, patients may have been granted the opportunity to raise more questions concerning their health conditions or other procedures (Tabler et al., 2014; McCormack & McCance, 2016). This situation may prompt the patients with higher levels of education to do the same thing wherein they can ask similar more questions regarding their treatment regime. Although these similarities on both groups in terms of decision-making and interacting with the healthcare providers, disparities could still impose hazards on the satisfaction which is being experienced by the patients on the manner they have received and interpreted the information and questions according to their level of education, and could display negative influence on their satisfaction levels (De Boer, Delnoij, & Rademakers et al.,2013).

Since several studies about patient experience have reported higher positive experience among patients with less educational attainment compared to groups with higher educational background, it seems possible that these results are due to bias than the actual differences acquired through healthcare experiences of patients (De Boer et al., 2013; Versteeg & Brouwer, 2016). This could be explained by the fact that individuals with less educational levels might have the possibility of experiencing too much information, decision-making and communication whilst the patients with higher educational level obtained less information and interaction from the healthcare providers (DeVoe, Wallace, & Fryer, 2009). Therefore, in

order to attain a better outcome of patient experience with respect to educational attainment of individuals who are receiving healthcare services, it is imperative to consider their preferences as well as more emphasis on the involvement of patients so as to avoid any discrepancies that might influence individuals' perception of their experiences (Williams-Roberts et al., 2018).

#### **6.4 Overall association with patient experience.**

In the current study, there were generally no significant association between the patient experience and the sex, age, level of education, time of hospital visit and the patients' length of stay from the regression data comparison in terms of the delivery of healthcare services in the emergency department observation unit (EDOU).

Although there has been a variation of patient groups being observed in this specialised unit in the emergency department, this indicates that the healthcare providers including the clinicians and nurses as well as other healthcare team are competent enough to showcase their clinical skills and competence with the goal of delivering high-quality standard care. This corresponds consistently with what has been found in previous studies (Sagi et al., 2016; McNicholas et al., 2017) positive experience of patients is tantamount to the success of healthcare services, and this experience is highly individualised. There are similarities between the attitudes expressed by different patients on their hospital stay experiences in this study and those described by Jha et al., 2017 that all sort of patients has its own perception and impression in line with the essential healthcare they are entitled to receive based on their individualised healthcare needs.

Additionally, this is particularly an encouraging result. This may simply be explained by the fact that patients have a reasonable and universal access to healthcare services in Norway, regardless of the hospital trust they have been presented or admitted (Regjeringen, 2018). It is believed that Norway has an established and organised health care system provided for their citizens. The coordination of care and services from primary to tertiary healthcare has been a critical point for establishing consistent and continuous high-standard quality care, and through this health care system the patients have the opportunity to avail the services they are entitled to (Helse- og omsorgsdepartementet, 2019).

Furthermore, although this has been true that access to healthcare services in Norway has not imposed serious challenges for its inhabitants, there are some studies (Kjøllestad et al.,

2020) that have expressed concern on the other hand of patient experience, and this is for example certain patient groups with different culture background. (Versteegh et al., 2016; Sun et al., 2019) have outlined that acquiring positive patient experience includes all patient groups, and this would be possible through incorporating the experiences of patients with different cultural background as well. This group may certainly serve as an additional resource for improving the quality of healthcare services, through imparting and investigating also the experiences they have received in the Norwegian health trusts since they are also a part of healthcare services recipients (Småland et al., 2010).

However, patient experience of all patient groups with diverse backgrounds have not been included in this current study (Kjøllestad et al., 2020) Despite of this, the findings have emphasised that majority of the patients have experienced the benefits of universal healthcare services, especially in the emergency department observation unit. In addition, patient experience is evolving in certain ways that surging interest on this aspect has becoming popular. In this study, several aspects of patient experience have been identified as crucial factors in strengthening and acknowledging the importance of delivering high-quality standard care.

Specifically, these are the patient-centred care approach, involvement of patients, outcomes of healthcare services, information/communication, patient safety, and patients' access to an organised health care system (Sjetne et al., 2011). Similarly, according to Sonis et al., 2017, it has generally pointed out that aspects of patient experience related to emergency care is important in delivering high-quality standard. Therefore, paying particular attention to these aspects of care, regardless of patient groups and their duration of hospitalisation is tantamount in keeping the standard or improving the deliverance of quality care, and increasing positive patient experience (De Boer et al., 2013; Sonis et al., 2017).

## **6.5 Implications for future research**

The standard short-form patient experience questionnaire (GS-PEQ) is an important survey tool that could aid in escalating concerns about the daily circumstances in healthcare. It is, indeed, a medium for identifying areas of improvement in the concept of patient experience. This could mirror the flaws of the healthcare system in all settings, most specially the emergency department observation or the short-stay unit. Several factors that are incorporated in the instrument contain critical dimensions which covers most aspects of both

the direct and indirect care affecting the deliverance of an effective and high-quality standard care that are necessary for further clinical and academical research. In addition, patient feedbacks through data collection in the form of surveys is an ideal way of examining the extent of effectiveness of healthcare services across all patients in the emergency department observation unit. This way, the patients have the opportunity to practice their rights as consumers of healthcare, be involved, heard and evaluate their experience.

On the aspect of clinical research, this survey instrument may enable the healthcare management composed of the leaders, clinicians, nurses and other allied health care team to navigate the direction of their competence into higher level needed in rendering rightful and ethical healthcare practise to all sort of patients. Thus, constant update of the healthcare professionals' skills and knowledge are considered one of the most important activity of developing a well-rounded care delivery as well as strengthening their capability of helping the health care organisations and management to maintain their good reputation toward the patients. On the area of academic research, this may mean imparting a great deal of evidence-based knowledge to students in terms of how they can be a valuable resource for positive changes in the healthcare sector. Thus, evaluating and deepening the understanding on patient experience may necessitate an influential, effective, efficient and safe delivery of high-standard quality care, and could lead to better satisfaction and healthcare system.

## **6.6 Strengths and limitations**

Accordingly, the strengths are that it is the first pilot study which has for the first time utilised the standard short-form questionnaire (GS-PEQ) in order to examine the area of patient experience of healthcare services in the emergency department observation unit (EDOU) in Norway. The GS-PEQ has been used as standalone tool without supplemental methods. An overall assessment of patient experience is incorporated. Also, this study has focused on the general aspects of patient experience and its outcomes, and not on condition specific context. In terms of statistical data analysis, the present pilot study had utilised the descriptive approach including the use of central tendency to determine the distribution of sample, the cross tabulation for examining the association of variables. Additionally, multiple linear regression had also performed to analyse the strength and association of variables. Further, it has provided information regarding the length of stay and socio-demographic characteristics of individuals in the emergency department observation unit.

On the other hand, it is plausible that a number of limitations could have influenced the results obtained. To begin with, this is a pilot study, where it aims to examine the effectiveness of the GS-PEQ as an independent survey tool in capturing the experience of patients in the emergency department observation unit. Despite of the very limited studies on emergency department observation unit (EDOU) and its factors including the length of stay and socio-demographic, several relevant publications on emergency department and acute care setting have been utilised in order to carefully scrutinise the contributions and attributes in identifying the pitfalls/gaps in the scope of patient experience. Secondly, since this is a small-scale type of pilot study, the samples were limited to only 100 participants. This could certainly affect and restricted the result of survey's reliability.

Thirdly, this pilot study has only been conducted in a single hospital trust in Vestre Viken, in Norway. The location and bed capacity of the emergency department observation unit of the study site could probably influence the generality of the result, wherein hospital trusts' structure and geography may differ from each other. Also, study participants might have the possibility of overreported or underreported their experiences and expectations during their stay which could have been reflected and affected the results of the study. Lastly, although this standard general questionnaire has previously been validated (Sjetne et al., 2011) in some other areas of healthcare facilities, there is a lack of reliability test which may signify the internal consistency of the GS-PEQ survey tool. In this study, a test-retest reliability and validity test were not performed, but the internal consistency of the questionnaire was examined.

## **6.7 Recommendations**

In-depth further investigations are needed to shed light on the mechanism underlying patient experience of healthcare services, specifically in the emergency department observation unit (EDOU). It might be possible to use a different methodological approach, for example mixed methods or a larger scale cross-sectional research, in which factors including the length of stay and socio-demographic characteristics could be fully examined and differentiate its significance. The use of GS-PEQ questionnaire could still be improved by incorporating additional written patient feedbacks that may draw attention on further improvement of quality care in the health care system. Also, larger scale study is recommended on this area with a larger population which may include participants with diverse cultural background in order to obtain more reliable results with higher power and

precision. Lastly, further research may warrant to the inclusion of more than one hospital trusts in examining and determining the influence of healthcare services on patient experience during their stay in the aforementioned specialised unit in the emergency department.

## **Chapter 7**

### **CONCLUSION**

The present pilot study appears to be the first study to thoroughly examine the area of patient experience using the standard short-form questionnaire (GS-PEQ) in the emergency department observation unit. In addition, this is the first study that has documented the association of length of stay and socio-demographic characteristics on the experience of patients admitted in a highly specialised unit in the emergency department. The gap in patient experience has been thoroughly and carefully examined to shed light on the issues concerning the delivery of high-quality care within this present study.

The most remarkable finding that stands out from this study is that the overall patient experience was positive. For practitioners and policy-makers, the findings provide as a basis for more improvement of the healthcare services rendition for the welfare of recipients of care and services. Increase satisfaction in the healthcare services the patients are receiving may mean positive experience as well. For the recipients of care and services – the patients, hearing their voices, feedbacks and involving them in their healthcare services journey may increase their trust and confidence in the healthcare providers and the health care sector.

Therefore, understanding and acknowledging the concept of patient experience and its associated factors are very crucial in the refinement of the healthcare system in a more dynamic approach, necessary to deliver safety, effective and efficient high-quality care to healthcare consumers, particularly in the emergency department observation unit.

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## **APPENDICES**

**APPENDIX A** Inclusion and exclusion criteria for research articles.

**APPENDIX B** Overview of total number search of literature.

**APPENDIX C** Norwegian Centre for Research Data (NSD) approval and decision letter

**APPENDIX D** Letter of approval Emergency Department Head Surgical Division – Ringerike Hospital

**APPENDIX E** Letter of approval Personvernombudet Vestre Viken Helseforetak

**APPENDIX F** Letter of approval Research Division Head – Ringerike Hospital

**APPENDIX G** Informed Consent Form

**APPENDIX H** GS-PEQ questionnaire with instructions for patients

**APPENDIX I** Information about the pilot study to clinical staff in the emergency department- Ringerike Hospital

**APPENDIX J** Dependent variables' frequency distribution

**APPENDIX K** Homoscedascity scatterplot

**APPENDIX L** Normality test of residual

**APPENDIX M** Normal Q-Q plot of unstandardised residual

Appendix A. Inclusion and exclusion criteria for research articles.

Inclusion	Exclusion
Patient experiences of care and services	
Emergency department observation unit	
Emergency department	
Literature from the period: 2005-2020	
Patient type: observation patients (medical and surgical)	
Patients' age: over 18 years	
Research articles are written in English	

Appendix B. Overview of total number search of literature.

Electronic database	Relevant articles included
CINAHL	12
Medline	7
Microsoft Academic (additional)	10
Total	29

# NSD NORSK SENTER FOR FORSKNINGSDATA

## NSD sin vurdering

### Prosjekttittel

Patient experiences with quality of care in the emergency department observation unit in Norway using GS-PEQ questionnaire: A pilot study

### Referansenummer

725151

### Registrert

13.07.2020 av Edmar Infante Agustin - s322120@oslomet.no

### Behandlingsansvarlig institusjon

OsloMet – storbyuniversitetet / Fakultet for helsevitenskap / Institutt for sykepleie og helsefremmende arbeid

### Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Ann Kristin Bjørnnes, anki@oslomet.no, tlf: 90134534

### Type prosjekt

Studentprosjekt, masterstudium

### Kontaktinformasjon, student

Edmar Infante Agustin, edmaragustin2017@outlook.com, tlf: 91284755

### Prosjektperiode

31.08.2020 - 30.06.2021

### Status

20.07.2020 - Vurdert anonym

## Vurdering (1)

---

### 20.07.2020 - Vurdert anonym

Det er vår vurdering at det ikke skal behandles direkte eller indirekte opplysninger som kan identifisere enkeltpersoner i dette prosjektet, så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet den 20.07.2020 med vedlegg, samt i meldingsdialogen mellom innmelder og NSD.

Prosjektet trenger derfor ikke en vurdering fra NSD.

**HVA MÅ DU GJØRE DERSOM DU LIKEVEL SKAL BEHANDLE PERSONOPPLYSNINGER?**  
Dersom prosjektopplegget endres og det likevel blir aktuelt å behandle personopplysninger må du melde dette til NSD ved å oppdatere meldeskjemaet. Vent på svar før du setter i gang med behandlingen av

Edmar Augustin  
Her

Dato: 01.07.2020  
Saksbehandler: HEB  
Direkte telefon:  
Vår referanse:  
Deres referanse:  
Klinikk/avdeling: Kirurgisk avdeling, RS

### Tillatelse til gjennomføring av masterstudie

Jeg mottok i går din prosjektbeskrivelse av studien «*Patient experiences with quality of care in the emergency department observation unit in Norway using GS-PEQ questionnaire: A pilot study*», med anmodning fra deg om svar denne uken. Jeg må påpeke at dette er uvanlig kort frist for tilgang til et forskningsfelt, særlig med tanke på at vi er i en sommerdrift. Jeg har følgende kommentarer:

- Før innsamling av data må vi ha en plan for hvordan informasjon om studien skal gis for å nå de mange faggrupper av helsepersonell som behandler pasienter i observasjonsposten
- Det må foreligge en informasjonsmappe som er tilgjengelig for de samme personer slik at man kan orientere seg om studien
- Innen det deles ut spørreskjema til pasienter må vi ha tilgjengelig kopi av din NSD-godkjenning for innsamling og oppbevaring av data

Under disse forutsetninger gis du tillatelse til å benytte akuttmottaket som forskningsfelt, slik det er beskrevet i prosjektbeskrivelsen. ved blant annet å gjennomføre spørreundersøkelse ved akuttmottaket på Ringerike sykehus.

Vennlig hilsen



Martin S. Olsen  
Avdelingssjef kirurgisk avdeling  
Ringerike sykehus  
Vestre Viken

Kopi: Avdelingssykepleier akuttmottaket

Post: Vestre Viken HF, Postboks 800, 3004 Drammen | Telefon: 03525 | Org. Nr: 894.166.762 | [postmottak@vestreviken.no](mailto:postmottak@vestreviken.no)  
Vår bank: Danske Bank | Kontonummer: 8601 72 17986. | IBAN: NO93 8601 7217 986. | SWIFT: DABANO22

Dato: 21.08.2020  
Saksbehandler: Jens Kristian  
Jebsen  
Direkte telefon:  
Vår referanse: 20/07024-1 /  
Deres referanse:  
Klinikk/avdeling: Stabsavdelinger  
VV HF /  
Administrasjon og  
kommunikasjon

## NOTAT

Til: Ann Kristin Bjørnnes ,veileder/prosjektleder, og Edmar Infante Agustin,  
masterstudent/sykepleier  
Fra: Jens Kristian Jebsen, personvernombud

### **Personvernombudets tilråding - Patient experiences with quality of care in the emergency department observation unit in Norway using GD-PEQ questionnaire: A pilot study**

Det vises til innsendt melding om gjennomføring av overnevnte masterprosjekt, datert 22. juli 2020.

Med hjemmel i forordning (EU) nr. 2016/679 (generell personvernforordning) artikkel 37, er det oppnevnt personvernombud ved Vestre Viken HF.

Den behandlingsansvarlige skal sikre at personvernombudet på riktig måte og i rett tid involveres i alle spørsmål som gjelder vern av personopplysninger, jf. artikkel 38. Artikkel 30 pålegger Vestre Viken å føre oversikt over hvilke behandlinger av personopplysninger virksomheten har. Behandling av personopplysninger meldes derfor til helseforetakets personvernombud.

Før det foretas behandling av helseopplysninger, skal den behandlingsansvarlige rådføre seg med personvernombudet, jf. personopplysningsloven § 10. Ved rådføringen skal det vurderes om behandlingen vil oppfylle kravene i personvernforordningen og øvrige bestemmelser fastsatt i eller med hjemmel i loven her. Rådføringsplikten gjelder likevel ikke dersom det er utført en vurdering av personvernkonsekvenser etter personvernforordningen artikkel 35.

Personvernombudet har vurdert studien til å kun behandle anonymiserte opplysninger. Dette forutsetter likevel at involverte ansatte som henvende seg til aktuelle pasienter og gjør dette i forbindelse med ordinær helsehjelp.

**Prosjektets formål**

Det fremgår av prosjektbeskrivelsen:

*This study aims to explore the patient experience of care using the structured generic short-form patient experience questionnaire (GS-PEQ) instrument in the emergency department observation unit. The study will concentrate on the following objectives:*

- 1. To pilot the short-form GS-PEQ instrument in context of patient experience in the emergency department observation unit.*
- 2. To evaluate the quality of care and services received and experienced by the patients, using tools of descriptive statistics.*
- 3. To determine the strength of association between patient experiences of care and overall patient experience, with that of factors that cause low/high satisfaction. This analysis will be done using regression and correlation.*

**Tilråding**

Databehandlingen tilfredsstillter forutsetningene for melding etter forordning (EU) nr. 2016/679 (generell personvernforordning) artikkel 30.

Personvernombudet tilrår at databehandlingen gjennomføres under forutsetning av følgende:

1. Behandlingsansvarlig virksomhet er OsloMet.
2. Avdelingsleder eller klinikkdirektør, samt klinikkens forskningsansvarlig har godkjent studien.
3. Behandling av data i prosjektet skjer i samsvar med og innenfor det formål som er oppgitt i meldingen.
4. Data lagres anonymt som oppgitt i meldingen. Annen lagringsform forutsetter gjennomføring av en risikovurdering som må godkjennes av Informasjonssikkerhetsleder.
5. Oppslag i journal med formål å identifisere potensielle deltagere til studien gjøres av ansatte ved helseforetaket som har selvstendig lovlig grunnlag for oppslaget.
6. Dersom formålet eller databehandlingen endres må personvernombudet informeres om dette.
7. Eventuelle fremtidige endringer som berører formålet, utvalget av inkluderte eller databehandlingen må forevises personvernombudet før de tas i bruk.
8. Den behandlingsansvarlige har rådført seg med personvernombudet, jf. personopplysningsloven § 10.
9. Studien er frivillig og samtykkebasert.
10. Data som mottas i forbindelse med prosjektet er anonymisert og oppbevares konfidensielt. Nedlåst i arkivskap på prosjektleders kontor.
11. Data som inngår i denne studien vil være anonyme slik at det ikke vil være mulig å finne tilbake til personen som opplysningene angår, verken via kodeliste eller at opplysningene i seg selv avslører hvem personen er.
12. Publisering i tidsskrift forutsettes å skje uten at deltagerne kan gjenkjennes direkte eller indirekte



13. Eventuelle krav fra tidsskrift om at grunnlagsdataene utleveres, skal behandles som en utlevering av helse- og personopplysninger. Denne tilråding dekker ikke utlevering til eksterne instanser utenfor Vestre Viken HF.
14. Data slettes eller anonymiseres ved prosjektslutt.

Med hilsen

Jens Kristian Jebsen  
Personvernombud

Edmar Agustin  
Her

Dato: 01.02.2021  
Saksbehandler: Sigrid Rød  
Direkte telefon:  
Vår referanse:  
Deres referanse:  
Klinikk/avdeling: Ringerike sykehus

### Godkjenning for gjennomføring av masterprosjekt ved Ringerike sykehus

**Prosjektbeskrivelse for studien «Patient experiences with quality of care in the emergency department observation unit in Norway using GS-PEQ questionnaire: A pilot study», ble forelagt klinikkledelsen ved Ringerike sykehus ultimo juni 2020, med spørsmål om tillatelse til gjennomføring i sykehusets akuttmottak.**

Masterstudent Edmar Agustin søkte i juni 2020 om å få gjennomføre sin masterstudie i akuttmottaket ved Ringerike sykehus. Studiens tittel er «*Patient experiences with quality of care in the emergency department observation unit in Norway using GS-PEQ questionnaire: A pilot study*». Vedlagt søknaden de nødvendige godkjenninger fra NSD (Norsk samfunnsvitenskapelig data) og personvernombudet i VVHF. Det ble gitt godkjenning av avdelingssjef Martin S. Olsen 1.julie 2020, for gjennomføring som omsøkt.

Det er også bedt om godkjenning fra fagsjef medisin/fungerende fagsjef forskning på tidspunkt for søknad. Med dette bekreftes at Edmar Agustins masterstudentprosjekt har vært kjent for og godkjent av undertegnede siden juli 2020.

Vennlig hilsen

Sigrid Rød  
Fagsjef medisin  
Ringerike sykehus  
Vestre Viken

## Vil du delta i mastergradsprosjektet

### «Pasienterfaringer med omsorgskvalitet i akuttmottakets observasjonsenhet ved bruk av spørreskjemaet GS-PEQ: En pilotstudie»

Dette er et spørsmål til deg om å delta i et mastergradsprosjekt hvor formålet er å undersøke pasienterfaringer med kvaliteten på omsorgen i akuttmottakets observasjonsenhet. I dette informasjonsskrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

#### Formål

Prosjektet har et mål å utforske hvor fornøyd pasienter er med kvaliteten på omsorgen ved bruk av et kort spørreskjema som heter «The Generic Short Patient Experiences Questionnaire (GS-PEQ)». Spørreskjemaet inneholder kvaliteten på pleien under deres opphold i akuttmottakets observasjonsenhet.

Opplysningene vil bli analysert og oppsummert på gruppenivå. Det vil bli skrevet en artikkel, og være utgangspunkt for bedrings og kvalitetsarbeid i avdelingen.

#### Hvem er ansvarlig for mastergradsprosjektet?

Masterstudent Edmar I. Agustin i samsvar med prosjektleder/veileder Ann Kristin Bjørnnes (ansatt og jobber ved OsloMet- Universitet) er ansvarlig for denne studien. Studien vil gjennomføres i samarbeid med akuttmottakets observasjonsenhet avdelingsleder, fagutviklingspsykeleier, og Vestre Viken Helseforetaks personvernombud.

#### Hvorfor får du spørsmål om å delta?

Du er trukket ut fordi du har mottatt nødvendig og øyeblikkelig helsehjelp fra akuttmottakets observasjonsenhet (spesialisthelsetjenesten) i perioden september til november 2020.

#### Hva innebærer det for deg å delta?

Dette er en kort spørreundersøkelse som innebærer at du vil svare på totalt 13 spørsmål knyttet til dine opplevelser med pleie/omsorg som pasient. Denne spørreundersøkelsen er beregnet å ta 15-20 minutter å fullføre.

#### Må jeg delta?

Det er frivillig å delta i prosjektet. Hvis du velger å delta, er studien vil bli behandlet anonymt. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta. Det vil **ikke** gå utover behandlingstilbudet dersom du velger å ikke delta, og at det ikke vil gå utover relasjonen til helsepersonellet.

#### Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Alle opplysninger i denne studien er anonyme. Opplysningene vil bli behandlet strengt konfidensielt og vil ikke bli benyttet på en måte som kan identifisere deg. Opplysningene vil ikke overføres til andre, men hovedfunnene fra studien vil være tilgjengelig for prosjektleder/veileder og prosjektansvarlig. En oppsummering fra studien vil kunne benyttes av akuttmottakets observasjonsenhet avdelingsleder og fagutviklingspsykeleier for undervisning og kvalitetsarbeid.

Alle opplysninger vil bli oppbevart på en sikker og kryptert datamaskin/harddisk ved Vestre Viken Helseforetak. Opplysningene vil bli oppbevart frem til prosjektet avsluttes, som er beregnet til juni 2021. Dine anonyme svar vil kun bli benyttet i dette prosjektet. Behandlingsansvarlig for dette prosjektet er OsloMet – Storbyuniversitetet. Dine data vil bli behandlet i tråd med standardene satt av EUs personvernforordning 2016 (GDPR).

**Hva vil skje med resultatene fra studien?**

Resultatene fra studiet vil bli oppsummert og benyttet i mitt masterprosjekt, samt publisering i et fagtidsskrift.

**Hvem kan jeg kontakte for mer informasjon?**

Hvis du har noen spørsmål eller ønsker mer informasjon om denne studien, kan du kontakte masterstudent Edmar I. Agustin på epost: [edmaragustin2017@outlook.com](mailto:edmaragustin2017@outlook.com). Du kan også kontakte min veileder Ann Kristin Bjørnnes ved OsloMet Universitetet på mail: [anki@oslomet.no](mailto:anki@oslomet.no) og/eller OsloMet Universitetets personvernombud Ingrid Jacobsen på mail: [ingrid.jacobsen@oslomet.no](mailto:ingrid.jacobsen@oslomet.no)

**PS! Sensitive personopplysninger må ikke sendes på epost.**

Med vennlig hilsen

Edmar I. Agustin  
Mastergradsstudent

---

Jeg har mottatt og forstått informasjon om prosjektet «*Pasienterfaringer med omsorgskvalitet i akuttmottakets observasjonsenhet ved bruk av spørreskjemaet GS-PEQ: En Pilotstudie*», og har fått anledning til å stille spørsmål.

**Jeg samtykker til:**

- å delta i spørreundersøkelsen

*Tusen takk!*

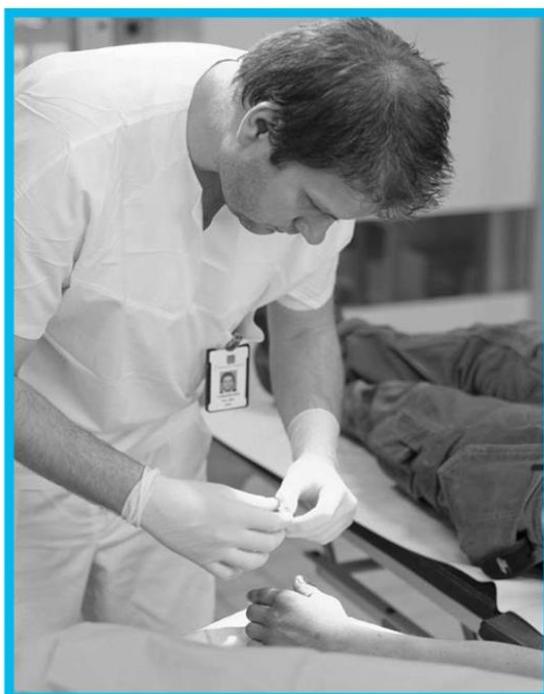


# Til deg som nylig har vært på sykehus

Om dine erfaringer med sykehuset

Preallipr. Seminar 2014

Målet med undersøkelsen er å forbedre kvaliteten på tilbudet ved norske sykehus.



Dine erfaringer er viktige og vi håper du vil bruke noen minutter på å fylle ut dettespørreskjemaet!

## Om dine erfaringer med akuttmottakets observasjonspost

Etttersom du nylig har hatt kontakt med **akuttmottakets observasjonsenhet** spør vi deg med dette om du vil besvare dette spørreskjemaet.

### 1. Informasjon om spørreskjemaet

Spørreskjemaet har 3 deler:

- Generell informasjon om deg og ditt opphold ved akuttmottakets observasjonspost
- De 12 spørsmålene om erfaringer du hadde ved akuttmottakets observasjonspost
- En samletvurdering om dine erfaringer under oppholdet ved akuttmottakets observasjonspost.

**Svarene** blir brukt som informasjon om **kvaliteten på tjenestene**, sett med brukernes øyne. Det er helt frivillig å svare.

### 2. Instruks

- Du får tildelt spørreskjema som er lagt i en konvolutt fra sykepleier som tar imot deg i akuttmottakets observasjonspost.**
- Skjema skal fylles ut FØR utreise, overflytting, eller før operasjon.**
- Et utfylt spørreskjema skal legges inn i konvolutten.**
- Utfylt spørreskjemaet leveres til sykepleieren i akuttmottakets observasjonspost.**
- Spørreskjemaet skal leveres FØR utreise, overflytting, eller før operasjon.**
- I spørreskjemaet fins det ordene: "behandlerne" og "det øvrige personalet",**

**Med "behandlerne" mener vi:**  
De som har hatt hovedansvar for undersøkelser og behandling. Oftest er dette leger, men mange får behandling av andre helsepersonell.

**Med "det øvrige personalet" mener vi:**  
På avdelingen/post → pleiepersonalet som sykepleiere.

*På neste side fins det spørreskjemaet*

## Generell Informasjon

**Kjønn:**  Mann  Kvinne

**Alder:**

18 – 35

36 - 50

51 - 65

66 – 75

76 - 100

**Besøksstid:**  Dag (7-15)  Kveld (15-23)  Natt (23-7)

**Utdanningsnivå:**

12 års utdanning

mindre enn 12 års utdanning

**Hvor lenge varte ditt opphold i akuttmottakets observasjonsenhet?**

inntil 24 timer

mer enn 24 timer

## Hvilke erfaringer hadde du på akuttmottakets observasjonsenhet?

(Kryss av i bare en boks for hvert spørsmål)

		Ikke i det hele tatt	I liten grad	I noen grad	I stor grad	I svært stor grad	Ikke aktuelt
1	Snakket behandlerne til deg slik at du forsto dem?	<input type="checkbox"/>					
2	Har du tillit til behandlernes faglige dyktighet?	<input type="checkbox"/>					
3	Har du tillit til det øvrige personalets faglige dyktighet?	<input type="checkbox"/>					
4	Fikk du tilstrekkelig informasjon om din diagnose / dine plager?	<input type="checkbox"/>					
5	Opplevde du at behandlingen var tilpasset din situasjon?	<input type="checkbox"/>					
6	Var du involvert i avgjørelser som angikk din behandling?	<input type="checkbox"/>					
7	Opplevde du at institusjonens arbeid var godt organisert?	<input type="checkbox"/>					
8	Fikk du inntrykk av at institusjonens utstyr var i god stand?	<input type="checkbox"/>					
9	Var hjelpen og behandlingen du fikk på institusjonen, alt i alt, tilfredsstillende?	<input type="checkbox"/>					
10	Mener du at du på noen måte ble feilbehandlet (etter det du selv kan bedømme)?	<input type="checkbox"/>					
		Nei	Ja, men ikke lenge	Ja, ganske lenge	Ja, altfor lenge		
11	Måtte du vente for å få tilbud ved institusjonen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		Ikke noe utbytte	Lite utbytte	En del utbytte	Stort utbytte	Svært stort utbytte	Ikke aktuelt
12	Hvilket utbytte har du hatt, alt i alt, av behandlingen på institusjonen?	<input type="checkbox"/>					

### Samletvurdering

Alt i alt, hva er erfaringene dine med akuttmottaket fra dette oppholdet?	Dårlige	Nokså gode	Gode	Meget gode	Utmerkede
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*Tusen takk for at du tok deg tid til å svare på spørsmål om dette oppholdet!*

## PILOTSTUDIE OM PASIENTERFARINGER I AKUTTMOTTAKETS OBSERVASJONSPOST

(Masterprosjekt)

Til: sykepleiere, leger, og andre helsearbeidere i akuttmottaket

Det skal gjennomføres en studie om pasienterfaringer i observasjonspost. Dette er en kvantitativ forskningsmetode. Det vil si at *spørreskjemaet* skal være benyttet for å innsamle og analysere data. Undersøkelsen er helt **anonymt** etter Norsk Senter for Forskningsdata (NSD)s tilråding og godkjenning. Studien har altså fått godkjent av Vestre Vikens Personvernombudet, og alle involverte ledere. NSD sier fra sin godkjenning at spørreskjemaer kan deles av kolleger på vegne av undertegnende på grunn av at undertegnende jobber på samme forskningsfelt der undersøkelsen gjennomføres.

Masterprosjektet omhandler kvalitetsarbeid, forbedring, samt pasientsikkerhet. Spørreskjemaet som skal benyttes er utarbeidet av Folkehelseinstituttet (FHI). Dette er en generisk kort versjon for å undersøke pasienterfaringer under sykehusoppholdet og andre institusjoner. Pasienter som skal bli innlagt på akuttmottakets observasjonspost etter legens vurdering, får tildelt spørreskjemaet av sykepleier(e) i observasjonspost.

Det skal sikres at spørreskjemaet er blitt tildelt, forklart til pasienter, og samlet for pasienter reiser, overflyttet, eller er fulgt på operasjon av sykepleiere i observasjonspost (eller før pasienter blir overflyttet til observasjonspost, og som venter på sin plass etter legens vurdering).

Datasamling eller utdeling av spørreskjemaet foregår hverdag. Det vil si at innsamling skjer hele døgnet hvis aktuelt. I tillegg er innsamlingen er av begrenset periode. Dette er fra September – Oktober 2020. Det skal registreres antall pasienter i en perm hverdag som har fått og levert spørreskjemaet. Slik har undertegnende og andre involverte oversikt, og før undertegnende skal kode alle svarte spørreskjemaet. Det blir 100 svarte spørreskjemaer som skal analyseres av undertegnende. Det er faktisk 100 pasienter som er planlagt på Ringerike sykehus akuttmottaket i den nevnte perioden.

Kriterier:

- Observasjonspost kandidater etter legens vurdering
- Pasienter over 18 år. (Det gjelder medisinsk og kirurgisk)
- Samtykkekompetent
- Oppholdet på observasjonspost innen 24 og/eller mer enn 24 timer
- Kan skrive og lese norsk språk
- Pasienter får tildelt spørreskjemaet fra sykepleier i obspost når pasienter ankommer obspost.
- Pasienter skal utfylle spørreskjema FØR utreise, overflytting eller operasjon.
- Hver enkel pasient skal legge inn utfylt spørreskjema i en konvolutt før de skal levere tilbake til sykepleiere eller før sykepleiere skal hente utfylte spørreskjemaer fra pasienter (SLIK IVARETAR PASIENTERS ANONYMITET)

OBS: Pasienter som har fått tildelt og svart på spørreskjemaet, og har oppholdt seg i mer enn 24 timer skal ikke svare (på andre gang) ved uhell. Dette menes at en pasient har fått igjen på grunn av kommunikasjonsvikt eller manglende koordinasjon fra begge parter. Slik unngår problemet med å kode også etter hvert.

Sykepleiere i observasjonspost skal sørge for at HVER ENKEL PASIENT får nødvendig informasjon om pilotstudien, utfylling, og ivaretagelse av spørreskjemaet. Sykepleiere kan også etterspørre eller minne pasienter om utfylling av spørreskjema underveis.

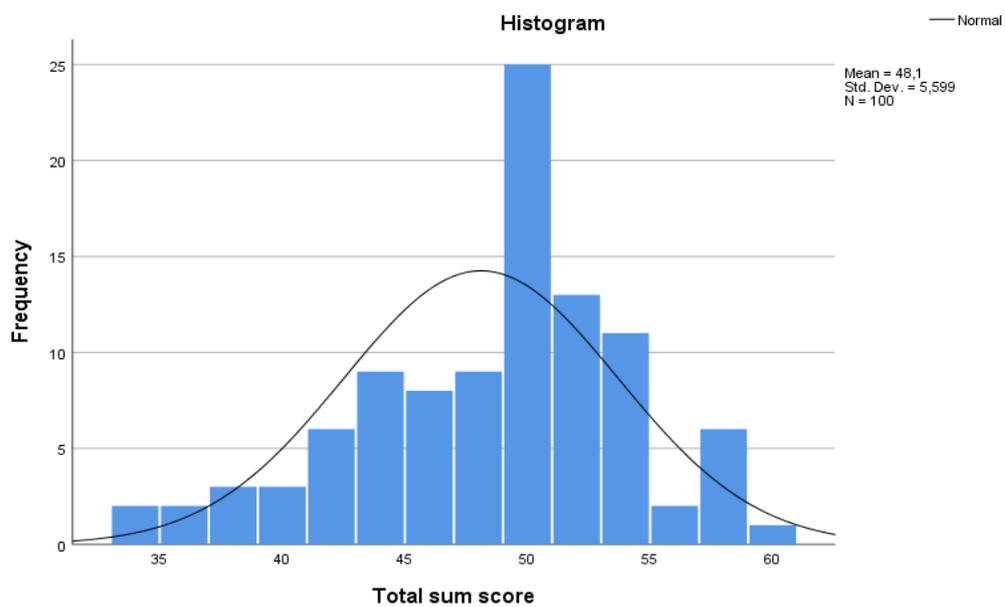
I tilfelle at det blir veldig opptatt på observasjonspost enten dag, kveld, eller natt, kan det være lurt at det er noen/en ute i mottak som kan hjelpe for å få oversikt over undersøkelsen.

*TUSEN TAKK FOR SAMARBEIDET!* 😊

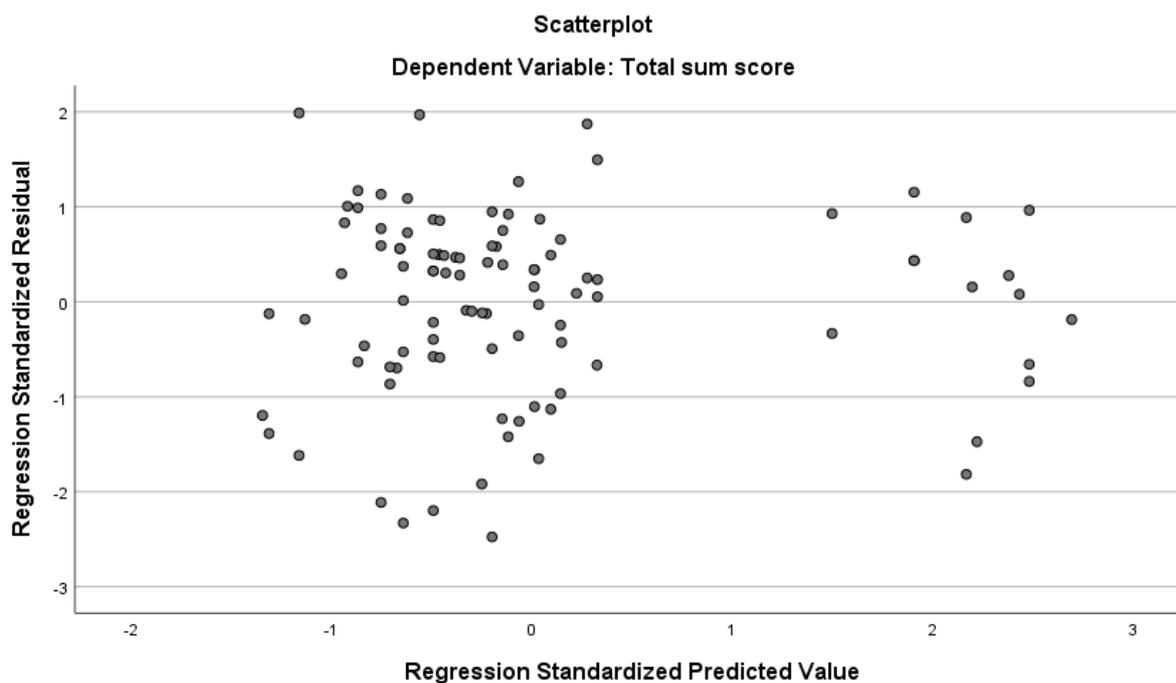
Edmar Agustin

Mastergradstudent/Sykepleier

## Appendix J. Dependent variables' frequency distribution



## Appendix K. Homoscedascity scatterplot



Appendix L. Normality test of residual

<b>Tests of Normality</b>						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	,107	100	,007	,968	100	,014
Standardized Residual	,107	100	,007	,968	100	,014

a. Lilliefors Significance Correction

Appendix M. Normal Q-Q Plot of unstandardised residual

