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# ASSESSMENT OF KNOWLEDGE OF NURSES ABOUT PREVENTION OF PRESSURE ULCER AT PRIVATE HOSPITAL IN LAHORE

BY

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# DEDICATION

This thesis work is dedicated to my honorable parents and especially my brothers who always want me to be successful. They inspired and encouraged me. My Husband is very helpful for me to carry out this study. Their financial support, time and inspiration have no words to be expressed. I would like to dedicate to my teacher **supervisor** who encouraged me to strive and being with me at every step.

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Aasma Nazir

# DECLARATION

The work reported in this thesis was carried out by me under the supervision of Prof DR. Syed Amir Gillani Department of Afro-Asian GC University, Faisalabad, Pakistan.

I hereby declare that the title of thesis Assessment of Knowledge of nurses about Prevention of Pressure Ulcer at private hospital in Lahore and the contents of thesis are the product of my own research and no part has been copied from any published source (except the references, standard mathematical or genetic models /equations /formulas /protocols etc). I further declare that this work has not been submitted for award of any other degree /diploma. The University may take action if the information provided is found inaccurate at any stage.



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## LIST OF ABBEREVIATIONS

| S/N | Abbreviations | Full Form |
|---|---|---|
| 1 | PU | Pressure Ulcer |
| 2 | EPUAP | European Pressure Ulcer Advisory Panel |
| 3 | NPUAP | National Pressure Ulcer Advisory Panel |
| 4 | SCI | spinal cord injury |
| 5 | Evidence-based practice | EBP |
| 6 | PARIHS | Promoting Action on Research |

| | | |
|---|---|---|
| | | Implementation in Health Services |

## ABSTRACT

**Introduction:** Pressure ulcers remain the chief complications of prolonged hospitalization, specifically in situations of poor nutrition, increased moisture on the skin (e.g., incontinence), prolonged pressure, and compromised sensory stimuli. This study assess the knowledge of nurses about pressure prevention in private hospital.

**Objective:** To assess the knowledge of nurses regarding pressure ulcers prevention

**Methodology:** A cross-sectional analytical study design will used to assess nurses knowledge about pressure ulcer. Sample size was 130.data was collected through questionnaire with randomize sampling technique. Questionnaire was distributed in nursing staff. Data analyzed by using the SPSS version 22.

**Results:** This chapter focuses on to data analysis. The statistical result of the demographic data, in which classification of Gender Mean is 1.58, Median 2.00, Mode 2, Std. Deviation.496, Variance.246 and Range is 1, Classification of age group , Mean is 2.37, Median 2.00, Mode 2, Std. Deviation. .997, Variance.994 and Range is 3. Classification of Education Mean is 1.42, Median 1.00, Mode 2, and Std. Deviation. .569, Variance. 323 and Range is 2. Classification of area working Mean is 2.49, Median 3.00, Mode 3, and Std. Deviation. .990, Variance.981and Range is 3 and Classification of Job Experience, Mean is 2.50, Median 3.00, Mode 2, Std. Deviation .990, Variance. 980 and Range is 3.

**Conclusion:** This study was conducted to assess level of nurses' knowledge towards pressure ulcer prevention. Education can bring a change in individual behavior so change in knowledge can influence the practices. So nurses need to get continuing education and training about pressure ulcer prevention that will enhance their knowledge and practices can be improved. Further researches about pressure ulcer prevention are needed.

***Key Words***

***Pressure ulcers**, Good Knowledge, Good Practice,*

# CHAPTER-1

## INTRODUCTION:

Pressure ulcers remain the chief complications of prolonged hospitalization, specifically in situations of poor nutrition, increased moisture on the skin (e.g., incontinence), prolonged pressure, and compromised sensory stimuli (Allman 2016).

Pressure ulcer is defined by the National Pressure Ulcer Advisory Panel (NPUAP) and European Pressure Ulcer Advisory Panel (EPUAP) as “localized injury to the skin and/or underlying tissue usually over a bony prominence as a result of pressure, or pressure in combination with shear and/or friction.” People most at risk of pressure ulcers are those with a medical condition that limits their ability to change positions, requires them to use a wheelchair, or confines them to a bed for a long time (Dorner, Posthauer et al. 2016).

Pressure ulcers result when increased pressure exceeds the local capillary pressure. Depending on patient’s severity of illness, less pressure may be adequate enough to obstruct capillary blood flow and can result in decreased oxygen delivery to tissues and as a result pressure ulcers can develop within 2 to 6 hours. If patients who are at risk of pressure ulcer are identified, effective measures will be taken to prevent its occurrence (Grol*et al.* 2013)

There are several factors contributing to the development of pressure ulcers. These included prior ulcers, peripheral vascular diseases, diabetic mellitus, smoking, prolonged immobility, poor nutritional status, incontinency, impaired sensation, and aging as intrinsic factors and pressure, shear, friction, moisture, poor moving, and handling as well as therapeutic devices as extrinsic factors. Nurses' knowledge and attitude are also viewed as extrinsic factors for pressure ulcer formation (C. H. Lyder).

Pressure ulcers result when increased pressure exceeds the local capillary pressure. Depending on patient's severity of illness, less pressure may be adequate enough to obstruct capillary blood flow and can result in decreased oxygen delivery to tissues and as a result pressure ulcers can develop within 2 to 6 hours. If patients who are at risk of pressure ulcer are identified, effective measures will be taken to prevent its occurrence (Dilie and Mengistu 2015).

Pressure ulcers increase the cost of hospitalization, increase patient morbidity and mortality, and play a significant role in the spread of infection in the clinical area (Holm, Mesch et al. 2017).

Pressure ulcers also known as decubitus ulcers (bed sores) are localized skin injuries that develop when soft tissue is compressed between a bony prominence and an external surface for a prolonged period of time. It leads to ischemia, cell death, and tissue necrosis, as capillaries are compressed and the blood flow is restricted The

cutaneous tissues become broken or destroyed, leading to progressive destruction and necrosis of underlying soft tissues. This process results in a painful and slow healing of pressure ulcer. Pressure ulcers are usually occurring over bony prominences such as sacrum, shoulders, occiput, ear lobes, elbows, and trochanters depending on patients' position (D.M.Durkin 2015)

If pressure ulcer occurred, it can cause decreased quality of life, infection, pain and disfigurement, alteration to sleep, delayed healing, increased morbidity and mortality rates, an increased need for intensive nursing and medical care, an increased workload for healthcare workers, and, as a consequence, increased healthcare costs. A patient with pressure ulcer has a mortality risk that is 2 to 6 times greater than a patient with intact skin. Despite its devastating effects, 95% of pressure ulcer can be prevented by managing both intrinsic and extrinsic risk factors as well as repositioning (Beckford-Ball 2015)

Pressure ulcers can occur in all age groups but are a particular problem in elderly persons living in a variety of settings. Because pressure ulcers are associated with significant morbidity and increased health care costs, the identification of persons with pressure ulcers and of those at risk for pressure ulcers is an important component of preventive care in the elderly. (R.May 2015).

Pressure ulcers remain the chief complications of prolonged hospitalization, specifically in situations of poor nutrition, increased moisture on the skin (e.g., incontinence), prolonged pressure, and compromised sensory stimuli ( Allman 2016).

Stage IV pressure ulcers have a high cost, and stopping the progression of early stage pressure ulcers can significantly reduce expenditures in resource strained facilities and decrease unnecessary pain impacting thousands of patient lives (Bliss and Simini 2018).

Pressure ulcers (PU) are common and costly secondary complication associated with spinal cord injury (SCI). It has been reported to be one of the major contributing factors to morbidity and mortality in patients with SCI. Research studies demonstrated significant costs and human sufferings due to development of PU in patients with lower mobility. The most serious complication of a PU is septicemia which is a life-threatening condition PU is a challenging problem for SCI patients, their attendants, and for therapists (DeVivo M 2011)



According to study that nurses are unaware of current pressure ulcer prevention recommendation and practices they are follow traditional practices methods rather than on evidences base guidelines. Nurses did not implement their knowledge into their practices. The nurses are practicing wrong practices which are part of old methods

and traditions, but it is not recommended from standards guidelines for pressure ulcer prevention. (Tubaishat, A. 2014).

Lack of nurses knowledge about pressure ulcer apparent barrier for using the guidelines in clinical practice Increased knowledge about pressure ulcer prevention among nurses not only improves the practice of pressure ulcer care but also reduces hospital stay (Maravilla, Lucero et al. 2015).

All patients who were identified as being at risk should have a management plan to prevent development of pressure ulcer, optimize healing, and prevent complications of existing pressure ulcer. Even though nurses make prevention part of their routine, there are some barriers to practice and care planning such as inadequate time,inconsistent documentation, lack of staff, lack of equipment, and lack of pressure ulcer related knowledge (Berlowitz 2013).

The presence or absence of pressure ulcers has been generally regarded as a performance measure of quality nursing care. Nurse, as a primary care giver should have the knowledge on pressure ulcer in order to carry out intervention necessary for prevention and management of complication of pressure ulcer. (Berlowitz 2013).

The attitude of nurses towards pressure ulcer prevention refers to their value related to risk assessment, maintaining healthy skin, management of mechanical loads, and education for patient and

family. Attitude is learned and is affected by knowledge and behavioral intent. It is used to express positive or negative feelings about a person, issue, or object. If a person holds a positive attitude toward an issue, this will increase the possibility of performing a supportive behavior related to that issue and vice versa.

Awareness about the significance of the problem, positive attitude towards prevention, and an adequate level of knowledge are cornerstones to effectively prevent pressure ulcers.

**Evidence-based pressure ulcer prevention**

Evidence-based practice is defined as “integrating individual clinical expertise with the best available external clinical evidence from systematic research” (Sackett *et al.* 1996). Guidelines based on research and expertise have been developed to support healthcare professionals. Guidelines for PU prevention have been available for many years. Over the years, these guidelines have been extended in an attempt to increase knowledge and include organizational factors for PU prevention and implementation (NPUAP/EPUAP 2014).

**Historical perspective**

The earliest examples of PUs have been found in Egyptian mummies, dated more than 5000 years old (Agrawal & Chauhan, 2012). In 1593, the clinical characteristics and causes of PUs were identified for the first time by FabriciusHildanus, a “father of German surgery”, who hypothesized that the development of a PU was

influenced by external and internal supernatural factors, and interruption of the blood and nutrient supply in the tissue (Defloor, 2006). During the sixteenth century, the first recommendations for PU prevention and treatment were developed, including good nutrition, debridement, and relief of pain and pressure (Agrawal & Chauhan, 2012).

Interestingly, these recommendations are still relevant to recently published guidelines for PU prevention strategies (NPUAP, EPUAP, & Pan Pacific Pressure Injury Alliance (PPPIA), 2014). In 1722, PU development was positively associated with mechanical pressure and incontinence (Defloor, 2006). In the nineteenth-century, Charcot suggested “neurotropic theory” as the causation of ulcers, rather than pressure or local irritation (Levine, 2005). However, this theory was rejected and direct pressure was then understood to be the main contributing factor for PU development (Agrawal & Chauhan, 2012).

In the twentieth century, shear and pressure forces were considered the fundamental factors for PU development; the same factors underlying the present understanding of PU aetiology (Agrawal & Chauhan, 2012). In recent years, many clinicians and researchers have paid closer attention to the PU phenomena in order to identify pathophysiological sequel, associated risk factors, and different prevention and treatment strategies (AWMA, 2012)

**Theoretical frame work**

In the present thesis, the framework Promoting Action on Research Implementation in Health Services (PARIHS) has been used in the planning and evaluation of an intervention. The framework was first presented in 1998 (Kitson*et al.* 1998), and in 2008 the authors published a revised version summarizing the team's conceptual and theoretical thinking (Kitson*et al.* 2008). The purpose of the framework is to provide a map of elements of importance for successful implementation. According to the developers, it could work like a checklist for the staff, to assess what they need to do to successfully implement evidence-based care (Kitson*et al.* 1998). The framework argues that there are three interacting elements that positively or negatively influence the success of implementation: evidence, context and facilitation. The core elements, sub-elements and conditions for successful implementation are described.



**Theoretical frame work of Evidence based practice**

| | | |
|---|---|---|
| **Evidence** | Research | Well-conceived, designed and executed research, |
| | Clinical experience | Consensus within similar groups<br>Judge as relevant |
| | Patient experiences | Patient as a partner |

| | | |
|---|---|---|
| **Context** | Context | Boundaries are defined<br>Information and feedback systems in place.<br>Decision-making appropriate/transparent Context is receptive to changes |
| | Culture | Able to define culture in terms of prevailing values/beliefs<br>Individuals and staff are valued<br>A learning organization |
| | Leadership | Transformational leadership<br>Effective organizational structures<br>Effective teamwork<br>Democratic inclusive decision making |
| | Evaluation | Feedback on performance<br>Multiple sources of information |
| **Facilitation** | Purpose | Holistic |
| | Role | Enabling others |
| | Skill and attributes | Holistic/enabling |

(Kitson*et al.* 1998).

According to the framework, it is important to identify signs of support or barriers in everyday clinical practice. Examples are: a shared understanding about the benefits, dis benefits, risk and advantages of the new over the old approach among the staff (evidence), transformational leaders, a learning organization,

appropriate monitoring, evaluation, and feedback mechanisms (context) together with appropriate facilitation (Kitson*et al.* 1998).

PARIHS has been widely used (Ullrich *et al.* 2014), but in empirical studies mostly as an organizing framework in analyses of the intervention process following, but not prior to the intervention. The framework has also been the subject of evaluation, which has provided reasonable evidence for the validity of its content and constructs (Harvey *et al.* 2002, McCormack *et al.* 2002, Rycroft-Malone *et al.* 2002a, Wallin*et al.* 2006). The strengths are described to be: planning facilitation strategies, flexibility and applicability to a range of settings. The primary issues regarding the weakness are described to be a need for greater conceptual clarity concerning the definition of sub-elements and the nature of the dynamic relationships among elements and sub-elements (Helfrich *et al.*2010).suggested that the framework should be enhanced to ensure that the theoretical development keeps up to pace with the current evidence-based research on implementation.

**Aim of the study**

The overall aim of the present thesis was to investigate hospital setting factors that are important to the performance of PU prevention. A further aim was to assessment of knowledge of nurses about prevention of pressure ulcer

The aim of this study was to determine the knowledge level and reported practice patterns of nurses related to identification and care of PUs. The results of this investigation will contribute to our understanding of nurses' knowledge about PU.

**PROBLEM STATEMENT**

Mostly nurses required training and education in any health care organization to provide best care to the patients but there is a gap between nurse's knowledge about pressure ulcer prevention and they consumed their knowledge to enhance best practice. Nurses have enough knowledge regarding pressure ulcer but they not utilize and perform poor practice about pressure ulcer prevention. Every nurse has responsibility to maintain proper patient's record. Nurses did not implement their knowledge in their practice because overcrowded in wards. Wrong practices of nurses are the part of old practice which is not recommended from standard guideline for pressure ulcer ( Ayello, E. A. 2008).

Poor knowledge and wrong practice in pressure ulcer increase the risk of pressure ulcer which may cause more complications. Therefore, nurses require regular training and education in this area of practice. (Lyder, C. H., &Ayello, E. A. 2008).

## SIGNIFICANCE OF THE STUDY

The purpose of these studies was to improve the knowledge and awareness of healthcare providers and clinical decision makers regarding the effectiveness of different PU prevention strategies in reducing incidence/prevalence. These include nursing workload, dependence on technological support, availability of effective devices, and critical illness. These alarming figures indicate that imperative change is required in the current practices for skin management for this patient population and complex practice environment. This research provided a novel approach to enhancing PU prevention in intensive care.The PU prevention bundle was also focused upon organizational issues in order to develop a problem-solving approach that will lead to an improvement in the quality of skincare for patients. Secondly, the implementation of the PU prevention bundle was monitored. Finally, the effectiveness of the PU prevention bundle was evaluated for its efficacy in reducing the PU incidence. This research is significant because it is the first study of its kind to test the effectiveness of a PU prevention bundle, combining the best available evidence to improve critically ill patients' skin integrity. Further, this research increases

knowledge and awareness of nurses regarding PU prevention and management to enable nurses to provide high quality nursing care.

**Operational definition**

**Pressure ulcers**

Pressure ulcers (also known as pressure sores or bedsores) are injuries to the skin and underlying tissue, primarily caused by prolonged pressure on the skin. They can happen to anyone, but usually affect people confined to bed or who sit in a chair or wheelchair for long periods of time



**Good knowledge**

Nurses, who scored above the mean score of the knowledge questions, were considered as having good knowledge on pressure ulcer prevention. But in the contrarily, those scored below the mean value considered as having poor knowledge towards prevention of pressure ulcer.

**Good practice**

Nurses who scored above the mean score of the practice questions related to prevention of pressure ulcer were considered to have good practice. But in the contrarily, those who scored below the mean score were considered as having poor practice towards prevention of pressure ulcer.

## Objectives of study:

The objectives of this study were to,

To assess the knowledge of nurses regarding pressure ulcers prevention



# CHAPTER-2

## REVIEW OF LITERATURE:

## PREVALANCE OF PRESSURE

World stop pressure ulcer day report in 2014 showed that nearly 700,000 patients were affected by pressure ulcers each year. Around 186,617 patients develop a new pressure ulcer in acute care each year. This has shown that in the year January 2012 to December 2013 between 4 and 6% of patients in acute care settings and more than 5–

10% of patients in non-acute care had pressure ulcers. Pressure ulcers are accountable for 2% of preventable deaths (Dilie 2015)

According to Coloplast pressure ulcer summit report, 60,000 people died as a result of the complications of pressure ulcer globally Within the national context, studies that aim to investigate nurses' knowledge, attitude, and perceived barriers towards pressure ulcer prevention practice have not been conducted or could not be found. (Coloplast 2013)

A study that was conducted in Felegehiwot Referral Hospital, Bahir Dar, Ethiopia, on hospitalized patients to assess prevalence and associated factors of pressure ulcer revealed that 16.8% of them had pressure ulcer.



In Pakistan, most of the data available about SCI patients and their complications was reported after 2005 earthquake. Tauqir et al. reported complications in SCI patients who sustained injury to spinal cord during 2005 earthquake in Pakistan. The study was conducted on 194 earthquake victims and it was reported that 20% SCI patients had developed Pu. In a prospective observational study Rathore et al. it was reported that 28.5% earthquake victims had developed PU (Tauqir SF 2016)

A detrimental aspect of health services in Iran is now perceived to be the high incidence and prevalence of PUs. In recent years, nursing education schemes have also paid special attention to this issue, talking more about PUs and conducting training workshops. For example, in addition to conducting classes on PUs as part of the educational curriculum, the Nursing and Midwifery Faculty conducted three major academic seminars for nurses and nursing students during the 2017-18 academic years. Three master's dissertations and two research proposals on PUs were also accepted and performed during this time. These activities suggest that PUs are receiving special attention in Iran, thus improving the awareness of nursing students. Also adding to the awareness of Iranian nursing students are international activities and new journals, including Wounds Middle East. (Rafiei 2019)

The prevalence of pressure ulcers in European hospitals ranges from 1% to 11% in medical wards and 4.7% to 66% in surgical wards (Chou, Dana et al. 2013).

It is estimated that more than one-third of patients with SCI suffer from PU once in their lives. PU occur in 25-30% of the SCI patients during the initial five years of their injury while the lifetime prevalence of PU in SCI patient is about 80% (7). Annual prevalence of PU ranges from 10.2–38% (8-11). PU account for about one-fourth of the cost of care

for SCI patients (8). In general, prevention of PU is less costly than the treatment of the PU itself (5). The incidence of SCI in developing countries is quite high yet data regarding PU in SCI patients in developing countries is lacking.

Quality improvement initiative in 2015, with the aim of researching the occurrence and frequency of pressure ulcers in hip fracture patients, as well as the level of expertise and documentation of nursing staff. Risk assessment and classification of pressure ulcers were implemented as quality measures in a prospective, controlled sample, conducted between March and October 2015. Risk assessment, risk warning and skin observation consisted of the procedures in the study community. This were carried out in the Accident and Emergency Department and eventually by the nurse on duty regularly during the hospital stay of the patient .(Flacco ME et al 2015)

As a routine, periodic observation of the skin for signs of pressure ulcer development was recorded. EPUAP indicates that the state of the skin should be tested and reported on a regular basis. Grade I pressure ulcers might be highlighted by the use of pressure ulcer classification. Repositioning was the most commonly recorded preventive action. As a preventive intervention, only 29 percent of the nursing staff reported specific mattresses/overlays. As a routine, periodic observation of the skin for signs of pressure ulcer development was recorded. EPUAP

indicates that the state of the skin should be tested and reported on a regular basis. Grade I pressure ulcers might be highlighted by the use of pressure ulcer classification. Repositioning was the most commonly recorded preventive action. As a preventive intervention, only 29 percent of the nursing staff reported specific mattresses/overlays. (Clark 2016)

Very few participants documented measures such as nutritional support, maintaining good hygiene and skin moisture, preventing skin injury due to friction and shear forces and patient education, and these were not registered in the patient records at all. Bostrom & Kenneth also found that, in comparison to more general treatments such as dietary support and patient education, interventions directly linked to skin care were quoted most frequently. (Bostrom J,2015)

Ehrenberg et al. It indicates that nurses are uncomfortable with abstractly communicating their acts and orders. Both RNs and NAs have been recorded for the use of lotion and are also documented in patient reports, but are not highlighted in the Swedish quality guidelines. (2010: Ehrenberg A) . In a conceptual scheme, Defloor has recently consolidated existing scientific understanding of risk factors, defining the causes of pressure ulcers in terms of compressive and shear forces. This model provides a detailed picture of the risk factor

relationship and provides a theoretical foundation for preventive intervention mechanisms. (Defloor 2013)

There are several scoring systems to classify patients at risk for the development of pressure ulcers. EPUAP guidelines) emphasize that as an adjunct to clinical judgment, a risk management tool should be used. The Updated Norton Scale (MNS), which has been reviewed, modified and used in Sweden, is the risk assessment method defined in the Swedish quality guidelines. It contains seven subscales: mental wellbeing, exercise, mobility, consumption of food, consumption of fluids, incontinence, and general physical condition. The treatment reporting of nurses was made compulsory by law in Sweden in 1986 (16±18), and the Swedish standard guidelines emphasize the documentation of pressure ulcer prevention..( Madadkar T (2019)

Pressure ulcer treatment has been identified as local wound treatment with dressings and pressure relief by repositioning the patient. Any nursing personnel reported exposure of the wound to air. This does not adhere to scientific understanding, which means that keeping the ulcer bed moist is most important. When treating a patient with a pressure ulcer, pressure relief by mattresses or overlays was recorded to a lesser extent than when doing preventive work. (AHCPR 2013)

A cross-sectional survey conducted among 248 nurses in Gondar University hospital using instrument developed by authors reported that

early more than half (54.4%) of the nurses had good knowledge of PU prevention of . Panayiotopoulos and Kerr , found that lack of staff manpower (94. 9%), lack of equipment (78. 8%) and overcrowding in the ward (79.1%) as the most frequently identified nurses' barriers to practice PU prevention. (Panayiotopoulos and Kerr G 2015)

Now days if a patient developed a pressure ulcer during his hospitalization it will indicate the poor quality of nursing care. Although to prevent a patient from a pressure ulcers are the responsibility of all health care professional but primarily are the responsibility of those who are involved in direct patient care and nurses are fore fronts for providing pressure ulcer prevention care. (Kaddourah, B & Al-Tannir, M. 2016)



previous study on average, in the questionnaire, students correctly answered 77.3 percent of the items. There was a strong positive association between the mean knowledge score of the students and their age (P=0.004, relative risk [rr] =0.299) and their mean knowledge score and the number of completed academic semesters (P=0.253, rr=0.016). Although the mean information score of male students was marginally higher than that of female students, the difference was not statistically significant (P=0.163). Independent t-tests showed that the mean information score was not significantly higher than other students

for students who participated in a PU workshop (P=0.502). Awareness of PU characteristics (P=0.649) by female students.

Rafiei et al (2014) used Pieper's nursing knowledge questionnaire. Senior nursing students were among the 133 participants from two nursing schools (semesters seven and eight). Their level of awareness was found to be lower than in the current study; 67.1 percent of the 41 items were answered correctly by participants and had lower scores for all three fields (onset: 77.8 percent ; characteristics: 49.6 percent ; and prevention measures: 69.5 percent ). (Rafiei et al 2014) A similar tool was used by Simonetti et al (2015) to research the awareness of 742 nursing students from seven nursing colleges in Italy. They found that there was a lower degree of PU awareness for students than in the present sample. (Simonetti et al 2015)



According to Bangladesh study results knowledge about the use of the risk assessment scale for pressure ulcers was only 12.1% and in Pakistan study results it was (37.2%). Even though study shows that our result regarding Braden scale are better as compared with Bangladesh study results but fact is that nurses were not have sufficient knowledge about the use of advance measures of pressure ulcer prevention. (Uba, M.., & Lola, N. 2015).

The study conducted in Ethiopia result found that what nurses mostly not practiced to prevent Pressure ulcer that is Attending seminars to

prevent Pressure ulcer (49.7%), using assessment scale to assess PU (56.2%) and using air bed for at high risk patient (44.1%), From current study in Pakistan one of what mostly nurses never do is documentation of all data related to Pressure ulcer development (42.1%) But in contrast this study revealed the results regarding nurses practices of pressure ulcer prevention that( 16.6%) use assessment scale, that is very low then Ethiopian nurses, nurses who using air mattress for patients who are at high risk for pressure ulcer development(23.3%).( Alih, F&Kever, R., 2015).

Nurses' knowledge, attitudes, and performance in association with practices of PU prevention in long-term care facilities in Korea have been evaluated. The evaluation result showed that nurses participating in this study held a moderate level of knowledge of PU prevention (60.1%) and exhibited positive attitudes towards PU prevention (Lee YJ,2014)

According to study that nurses are unaware of current pressure ulcer prevention recommendation and practices they are follow traditional practices methods rather than on evidences base guidelines. Nurses did not implement their knowledge into their practices. The nurses are practicing wrong practices which are part of old methods and traditions, but it is not recommended from standards guidelines for pressure ulcer prevention. (Tubaishat, A. 2014).

Furthermore nurses good knowledge regarding pressure ulcer prevention not only can improve the quality of nursing care but also within this reduce the patients duration of hospital stay and the number of patients suffering from this painful condition. (Smith, D., & Waugh, S. 2009).

Another s study showed that 38.8% of nurses had inadequate knowledge about pressure ulcer prevention practice. This is less than a study done in Bangladesh, where 57.8% of nurses had inadequate knowledge, and in Jordan, where 73% of nurses had inadequate knowledge about pressure ulcer prevention . The possible explanation could be lack of trainings and evidences supported by research. (S. Islam 2010)



(Kallman 2012) conducted an attitude test across a health care district in Sweden. They found that nurses had exhibited positive attitudes towards PU prevention. More than 94% of participants indicated that nurses hold important responsibilities for preventing PU. (Kallman 2012)

According to the performance related to PU prevention, to evaluate the risk factor for PUs, the majority of respondents answered “performed all patients” (82.3). In the evaluation period, 205 respondents (72.7) said that they would “continuously evaluate while they are in the

hospital.” Most nurses answered that nursing records were completed to prevent PUs for all patients (83.7). (Paik MR.2012)

Lawrence and colleagues found that more than 80% of 827 clinicians demonstrated a high level of knowledge, and 90% of them answered more than half of the question items correctly. Kaddourah and colleagues' study also showed that more than 73% of 105 nurse participants had sufficient knowledge. (Paik MR.2012)

Several studies have been undertaken to evaluate nurses’ knowledge to pressure ulcer prevention using different instruments, cutoff point and professional nurses (assistant, registered and students). A cross-sectional multicenter study among nurses in Belgian hospitals reported that only 23.5% (130/553) of the nurses had scored ≥60% mean knowledge of pressure ulcer prevention. Demarr’e et al. also displayed a low mean score (28.9%) of knowledge for registered nurses and nursing assistants (n = 145) in nursing home settings. In contrast, a survey in a Swedish healthcare setting among nursing staff showed that all respondents displayed good knowledge on prevention and treatment of pressure ulcers. (Demarr’e L 2011)

(Lee YJ,2014) who examined responses from 217 nurses working in three hospitals in Ethiopia, found that they scored 80% or more in knowledge, indicating their knowledge was adequate, and respondents

who scored above the median point in the attitude towards PU prevention were deemed to have positive attitudes towards PU prevention. This study reported that 68.4% of respondents showed positive attitudes, especially in the area of PU prevention practice. (Lee YJ,2014)

According to an international literature, it has been identified that nurses' knowledge of the prevention of pressure ulcers is poor, which is reflected in their practices as they do not comply with best practice guidelines (Gunningberg L 2011)

Study conducted in Sweden on nurses' knowledge and practice of existing guidelines on prevention of pressure ulcer found that, majority of them had inadequate knowledge and practice to implement guidelines (Clark MB 2012)



Similarly, a study in Belgian Hospital found that knowledge of nurses about the prevention of pressure ulcers was inadequate Poor knowledge and practice of nurses have its own significant contribution for higher prevalence of pressure ulcers (Kimberly C 2007

Moreover, a study in Bahir Dar, Ethiopia found that a total of 71 pressure ulcers were detected in 422 patients, with the prevalence rate of 16.8 %. The prevalence of pressure ulcer was higher in male respondents than in female respondents, because, even if the prevention of pressure ulcers is a multidisciplinary responsibility,

usually nurses play a major role and it is considered to be an essential part of nursing care in high income countries. Thus preventing ulcer should be the goal of all nurses but it is rarely researched in low income countries like Ethiopia. (Gedamu H 2014)

Patients admitted to hospital settings still suffer from preventable PUs. Even if evidence-based guidelines are available for healthcare professionals, prevention measures are not used for a large proportion of patients at risk for developing PUs This leads to reduced quality of life for patients who do develop a PU and high costs for the healthcare system (Dealey*et al.* 2012).

Pressure ulcer prevention is important in Turkey, especially as the proportion of elderly individuals continues to grow. In a study of 530 adult patients treated in a university hospital with an 850-bed capacity, Akıl and coinvestigators12 reported that 25% were at risk for pressure ulceration and 8% were deemed at very high risk. According to the results of 2 different studies conducted in university hospitals in the 2 largest cities of Turkey, PU prevalence was 7.2% and 8.11%, respectively, and the highest proportion of patients were at risk for developing PUs.(Akil 2008)

(Frielingsdorf and Dunn 2019) found in a study done in Cape Town that 11% of participants arrived at the tertiary hospital with PUs and a further 11% developed PUs at the tertiary hospital. The reasons for the

clients arriving with PUs included delayed transfers from secondary and primary healthcare services and the use of hard fracture-boards by paramedical transport services (Frielingsdorf and Dunn 2019)

A review of the literature found relatively few studies looking specifically at nurses' knowledge and the impact of education on pressure sore prevention and treatment. It was not possible from the literature to establish a 'core curriculum' or commonality in nursing education about pressure injury. This raises issues with regard to defining a minimum acceptable level of knowledge, competence or skill, and whether these should be taught in pre- or post-registration courses. Vogelpohl and Dougherty2 reviewed 10 key texts used in nursing schools in the USA and found that material relating to pressure sore prediction and prevention was limited to approximately 200 lines of text and 10 illustrations. (Vogelpohl and Dougherty)

In the twentieth century, shear and pressure forces were considered the fundamental factors for PU development; the same factors underlying the present understanding of PU aetiology (Agrawal & Chauhan, 2012). In recent years, many clinicians and researchers have paid closer attention to the PU phenomena in order to identify pathophysiological sequel, associated risk factors, and different prevention and treatment strategies (AWMA, 2012)

According to Coloplast pressure ulcer summit report, 60,000 people died as a result of the complications of pressure ulcer globally Within the national context, studies that aim to investigate nurses' knowledge, attitude, and perceived barriers towards pressure ulcer prevention practice have not been conducted or could not be found. (Coloplast 2013)

In Pakistan, most of the data available about SCI patients and their complications was reported after 2005 earthquake. Tauqir et al. reported complications in SCI patients who sustained injury to spinal cord during 2005 earthquake in Pakistan. The study was conducted on 194 earthquake victims and it was reported that 20% SCI patients had developed Pu. In a prospective observational study Rathore et al. it was reported that 28.5% earthquake victims had developed PU (Tauqir SF 2016)

The prevalence of pressure ulcers in European hospitals ranges from 1% to 11% in medical wards and 4.7% to 66% in surgical wards (Chou, Dana et al. 2013).

A study that was conducted in Felegehiwot Referral Hospital, Bahir Dar, Ethiopia, on hospitalized patients to assess prevalence and associated factors of pressure ulcer revealed that 16.8% of them had pressure ulcer.

A study conducted in Ethiopia in which the author asked 22 question from participants to assess their knowledge on pressure ulcer prevention, and they were categorized in to two groups based on their score in relation to the mean. The mean score was 12.79 (SD = 3.21). More than half (54.4 %) of the respondents were found to have good knowledge, while a substantial proportion (45.6 %) of the respondents were not. From the six dimensions of knowledge regarding prevention of pressure ulcer, the nurses had a poor knowledge on three including risk assessment, skin care and management for mechanical loads. But, they possessed a good knowledge on factors related to pressure ulcer formation (M = 71.9, SD = 25.2), benefit of nutrition to maintain healthy skin (M = 69.9, SD = 29.1) and importance of staff training (M = 60.7, SD = 34.2)



The study revealed the results regarding nurses practices of pressure ulcer prevention that (16.6%) use assessment scale, that is very low then Ethiopian nurses, nurses who using air mattress for patients who are at high risk for pressure ulcer development (23.3%), and only (22.5%) nurses document all data regarding to pressure ulcer assessment which is even lower then Ethiopian nurses practices. there were only (15.8%) nurses who attend seminars about pressure ulcer prevention. Overall nurse's practices toward pressure ulcer prevention were very lower than the Ethiopian study results.(Qaddumi, J 2014)

Authoritative organizations have developed and supported evidence-based recommendations for pressure ulcer prevention. Noncompliance with these guidelines is widely documented, however. In clinical practice, negative attitudes and lack of expertise can act as barriers to using guidelines. Evidence-based recommendations have been developed and supported by authoritative organizations for pressure ulcer prevention. Non-adherence to these guidelines, however, is also documented. In clinical practice, negative attitudes and lack of experience may serve as obstacles to using guidelines. In a random sample of 14 Belgian hospitals, covering 207 wards, a cross-sectional multicentre analysis was conducted. Of that party, 94 wards were selected at random (2105 patients). A random sample of at least five nurses completed a thoroughly validated information and attitude instrument from each participating ward. 553 nurses participated in total. In Belgian hospitals, the awareness of nurses about the prevention of pressure ulcers is insufficient. Nurses' attitudes towards pressure ulcers are strongly associated with the implementation of effective prevention. There was no connection between awareness and the implementation of effective prevention. (Dimitri Beckman 2011)

Dimitri Beckman discus the result of hid study the prevalence of pressure ulcers (Category I-IV) was 13.5% (284/2105). Around 30% (625/2105) of the patients were at risk (Braden score <17 and/or

pressure ulcer presence). Of these patients, only 13.9 percent (87/625) obtained entirely adequate prevention when in bed and while seated. 49.7 percent and 71.3 percent, respectively, were the mean awareness and attitude ratings. The use of adequate prevention on a nursing ward was significantly associated with the nurses' attitudes (OR = 3.07, p = .05). No independent association between information and the use of adequate prevention (OR = 0.75, p = .71) was found. (Dimitri Beckman 2011)

Health conditions that have resulted in human misery, discomfort, disfigurement, loss of productive time, and financial burden are pressure ulcers (PUs). Given the reality that PU is largely avoidable and recent health care developments have dramatically increased PU rates in health care facilities. For nurses, a PU education program is a valuable tool. It offers an opportunity to enhance PU awareness, keep up with current PU information, and eliminate the misery of patients. In addition, PU education programs will assist nurses to establish professional attitudes that will enable them to increase the quality of nursing care. (Chamanga, E.2011).

The research explored the influence of the pressure ulcer education program on the awareness, behaviours, attitudes and intentions of nurses about PU prevention and care. There was an interventional approach using the before-after test design. Out of eight hospitals in

Jordan, two hundred and twenty nurses were randomly chosen. PU knowledge and practice assessments based on EPUAP guidelines assessed the knowledge and practice of nurses about PU while attitudes and intentions were measured using scales. The study showed that the skills, procedures, behaviors and intentions of nurses towards PU prevention and care have been strengthened. In relation to the awareness, activities, attitudes and intentions of nurses towards PU prevention and treatment, demographic variables such as gender and years of experience were influential. Findings also showed a lack of correct PU management information among nurses and positive attitudes of nurses towards PU prevention and treatment. (Chamanga, E.2011).



# CHAPTER-3

# MATERIALS AND METHODS

**Study design:**

A cross-sectional analytical study design was used to assess nurse's knowledge about pressure ulcer. A cross-sectional is that study that collects information from a population at specific time of period.

**Study site:**

This Study were carry out at university of Lahore Teaching Hospital located on Rewind road and Bahria International Hospital in Bahria, these hospitals are well skillful. Both hospitals are well equipped laboratories. Patient came to these hospitals from different areas of Lahore. In this study data were collected from nurses of deferent wards

**Study settings:**

The setting for this research were Medical ICU, Cardiac ICU, Surgical ICU, Medical and Surgical wards of ULTH and Bahria Hospital in Lahore.

**Study population:**

Data were collect from staff nurses who were presently perform their duties in medical ICU, cardiac ICU, Surgical ICU, Medical and Surgical wards of ULTH and Bahria Hospital at Lahore.



**Simple size**

Sample size is by convenient selection.

If total population is 228

If N=Population, n=Sample size, E= Margin of error

$n=N/1+ (N) (E)^2$

$n=228/1+ (228) (0.05)^2$

$n=228/1+ (228) (0.0025)$

n= 228/1+0.75

n=228/1.75

n=130 and my sample size is 130

**Inclusion criteria:**

All staff nurses of medical ICU, cardiac ICU, Surgical ICU, CCU, medical and surgical wards of ULTH and Bahria Hospitals were included in my study.

- Those nurses who were present.
- Those nurse who have more than 1 years' experience.
- Those nurse who were able to participate.
- Both male and female nurses
- Those nurse whose age is less than 30 years

**Exclusion criteria**

All staff nurses of medical ICU, cardiac ICU, Surgical ICU, CCU, medical and surgical wards of ULTH and Bahria Hospitals were not included in my study

- Those nurse who were not present.
- Those nurse who have less than 1 years' experience.
- Those nurse who were not able to participate.

- Those nurse whose age is more than 30 years

**Data collection plan:**

A well-structured questionnaire with closed ended Likert scale is adopted from the previous studies. “Assessment of nurse’s knowledge towards prevention of pressure ulcer”. The questionnaire consists of two sections such as knowledge and practice. These questionnaires were distributed among staff nurses of medical ICU, cardiac ICU, Surgical ICU, CCU, medical and surgical wards of ULTH and Bahria Hospitals

. This questionnaire consists of many questions such as about nurse’s knowledge, experience, attitude and practice.



**Data Analysis**

The descriptive statistics include the demographic data, factors and represented using frequencies and fraquancy percentage, etc. In this research “Assessment of knowledge of nurses about prevention of pressure ulcer,

This also includes the demographic data of the nurses that is age, gender, and prior experience. Frequencies of the data were calculated through SPSS. Assessment of knowledge of nurses about prevention

of pressure ulcers is categorized in favorable (agree to strongly agree) and unfavorable (disagree to strongly disagree).

Frequencies and percentage of the factors were calculated. Data collected in this research was analyzed on IBM SPSS (Statistical Product and Service Solution), 21 version.

**Research tool:**

In this study well adopted questionnaire was used with closed ended question as per Likert scale. This questionnaire was developed by Lee M &Yom Y in 2007.This questionnaire based on nurses knowledge towards prevention of pressure ulcer in both hospitals. This questionnaire consists of many questions which based on evaluate or assess nurses knowledge. . Feedback of the nurses was calculated by 5 point Likert scale. 1= strongly disagree, 2=disagree, 3= neutral, 4= agree and 5= strongly agree.

Questionnaire consists of 2 parts. First part is based on the demographic data of the nurses such as name, gender, marital status and education, etc. Second part of the questionnaire is the variables of this study

**Ethical considerations:**

Ethical principle was performed during research study. Permission was taken from the Ethical committee of department in

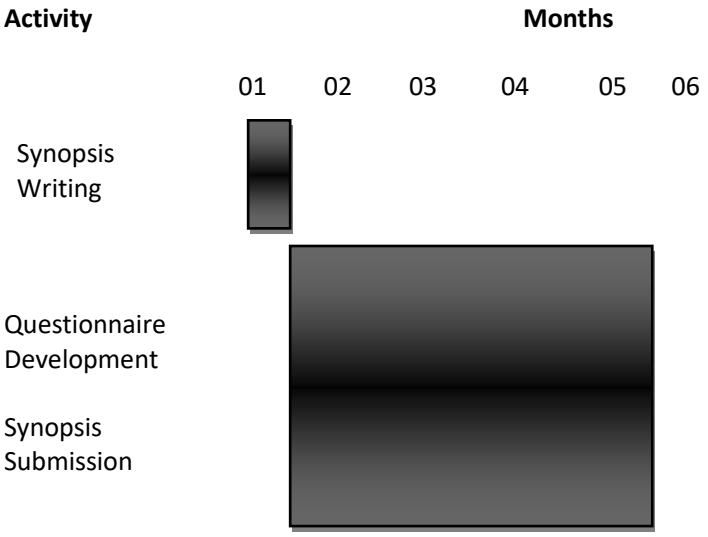
superior university. I was take permission from the MS of Medical and Surgical Department of ULTH and Bahria hospital. Give complete information to the participant related to research. It makes sure that no harm given to the participant. Study was beneficial. All participants were open opportunity to participate in research. No one was forced to participate in research. Nurses were sign informed consent. Before signing consent nurses were informed about purpose, methodology, risk and benefits of investigation

The information or data was remaining to the first researcher.



**GANTT CHART**

**RESEARCH WORK PLAN**



Data collection

Data analysis
And
Interpretation

Thesis
Complication

Thesis presentation
And submission

# CHAPTER-4

## Results

### Data Analysis

This chapter focuses on to data analysis. Main statistical procedures applied on data were discussed on chapter number 4 and in this chapter after application of statistical procedures. The results show the statistical result of the demographic data, which consist of classification of Gender, Classification of age group , Classification of Education and Classification of area working and also shows the score participants about variables in frequency and percentage form.

### NORMALITY TEST

At first data was analyzed for missing values and other typing errors were also analyzed so that errors could rectify. Value of the data was assessed by analyzing normality. Normality was examined through skewness and kurtosis (Munro, 2005).scores of knowledge of nurses, were normally distributed and were well in range +1 to -1 hence findings indicated normality of the data.

### Skewness and Kurtosis

A general guideline for **skewness** is that if the number is greater than +1 or lower than –1, this is an indication of a substantially **skewed** distribution. For **kurtosis**, the general guideline is

that if the number is greater than +1, the distribution is too peaked and here skewness of knowledge is -.088 and Kurtosis -.546

**Table 2**

**Summary of skewness and kurtosis results**

| | Skewness | Kurtosis |
|---|---|---|
| KNOWLEDGE | Statistic | Statistic |
| | -.088 | -.546 |

## RELIABILITY ASSESSMENT

Presents Cronbach's alpha for four scales used in the study. Cronbach alpha is the most commonly used measure of scale reliability (Cortina, 1993). Cronbach alpha above 0.70 is considered to be the acceptable indicator of internal consistency reliability



**Table 3**

**Summary of Reliability assessment**

| **Variables** | **Cronbach's alpha** |
|---|---|
| Demographic data | .794 |
| Knowledge | .784 |

**Hypothesis Statement:**

**Null Hypothesis:**

The knowledge of nurses from both Hospitals regarding pressure ulcer is same.

$H0$: $\mu 1 = \mu 2 = \mu = \mu 4$

**Alternative Hypothesis:**

The knowledge of nurses from both Hospitals regarding pressure ulcer is different.



## Demographic analysis

### Classification of Gender

The below table and graph number 1 show that data was collected from both genders. The male respondents were 42.3 % (n=55) and the female respondents were 57.7% (n=75).

**Table 1**

**Classification of Gender**

| | Frequency | Percent |
|---|---|---|
| Male | 55 | 42.3% |
| Female | 75 | 57.7% |
| Total | 130 | 100.0% |

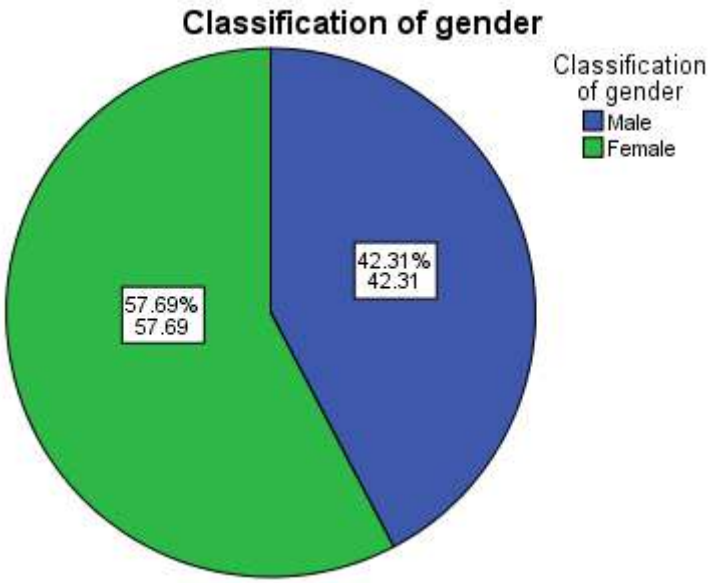



*FIGURE 1*



## Classification of Age

The whole proportion of sample size comprised on male nurses and female nurses in both ULTH and BIHL hospitals (n=130,100%). About 22.3% (n= 29) of the respondents were 20 to 25 years old 33.8% (n=44) between 26 to 30 years of age, 28.5% (n=37) were between 31 to 35 years age and 15.4% (n=20) were between 36 to 40 years of age.

**Table 2**
**Classification of Age**

| | Frequency | Percent |
|---|---|---|
| 20-25yrs | 29 | 22.3% |

| | | |
|---|---|---|
| 26-30yrs | 44 | 33.8% |
| 31-35yrs | 37 | 28.5% |
| 36-40yrs | 20 | 15.4% |
| Total | 130 | 100.0% |

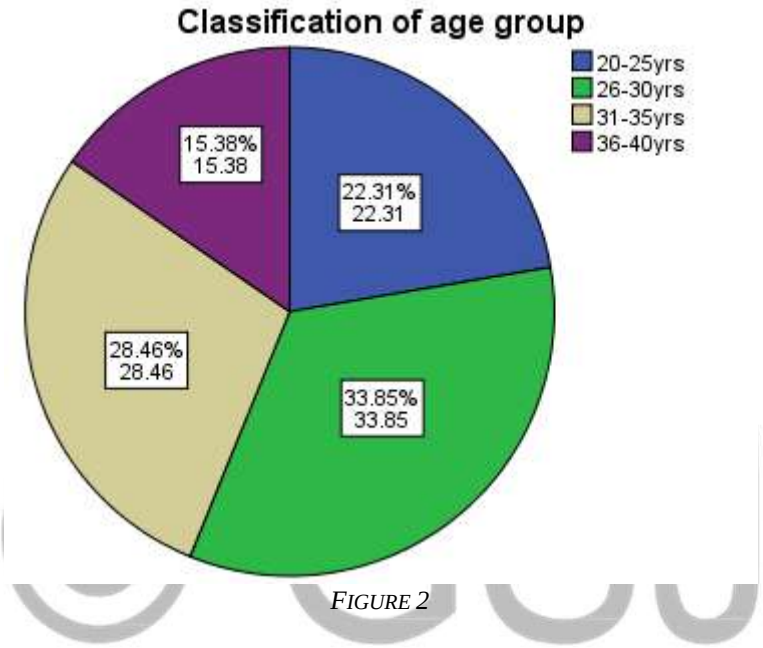



*FIGURE 2*

## Classification of Education

Most of the respondents were G. Nursing61.5% (n=80), and the 34.6% (n=45) were at Generic Nursing/ Post RN and contrast to this 3.8% (n=5) were categorized in MSN. More details are given in table and graph

**Table 3**
**Classification of Education**

| | Frequency | Percent |
|---|---|---|
| G. Nursing | 80 | 61.5% |
| Generic Nursing/ Post RN | 45 | 34.6% |
| MSN | 5 | 3.8% |

| | | |
|---|---|---|
| Total | 130 | 100.0% |

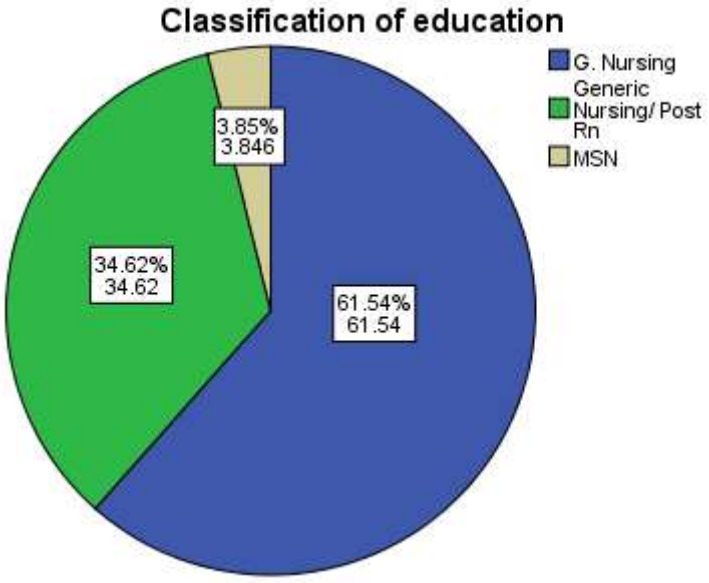



*FIGURE 3*



## Classification of Area working

The below table and graph number 4 show the classification of working area in which 19.2% (n=25) nurses working in Adult Medical Ward, 29.2 %( n=38) participant wore working in Adult surgical ward, 34.6% (n=45) participant working in ICU and 16.9% (n=22) participant working in others mention wards.

**Table 4**
**Classification of Area working**

| | Frequency | Percent |
|---|---|---|
| Adult Medical Ward | 25 | 19.2% |

| | | |
|---|---|---|
| Adult surgical ward | 38 | 29.2% |
| ICU | 45 | 34.6% |
| Others | 22 | 16.9% |
| Total | 130 | 100.0% |

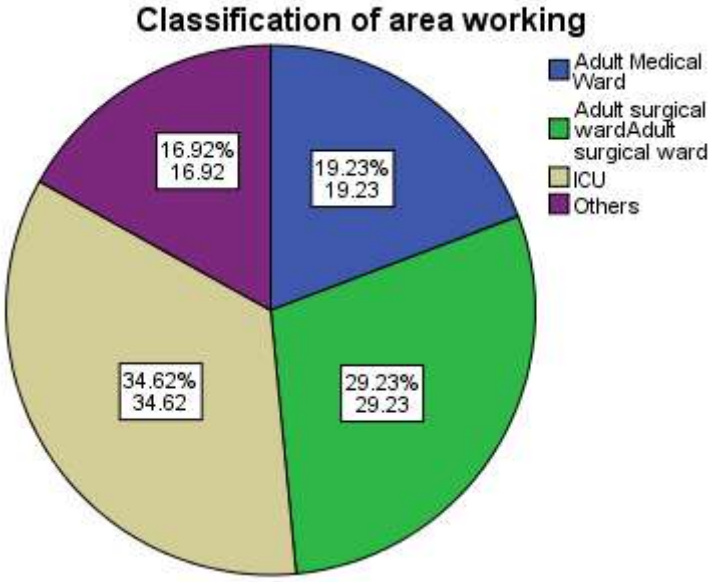



*FIGURE 4*



## Classification of Job Experience

Total number of participant were 130 in which 19.2 %( n=25) were < 1 Year job experience, 30.8% (n= 40) participant experience were 1-5 Years, those participant whose experience were 6-10 Years were 33.1% (n=43) participants and above 10 Years' experience were 16.9% (n=22) participants

**Table 5**

**Classification of Job Experience**

| | Frequency | Percent |
|---|---|---|
| < 1 Year | 25 | 19.2% |
| 1-5 Years | 40 | 30.8% |
| 6-10 Years | 43 | 33.1% |
| Above 10 Years | 22 | 16.9% |
| Total | 130 | 100.0% |

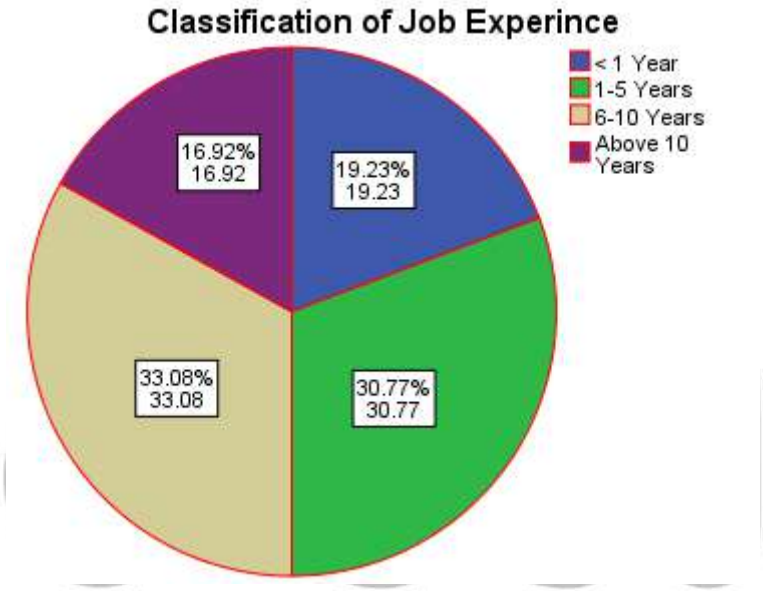



*FIGURE 5*

**DESCRIPTIVE ANALYSIS OF KNOWLEDGE:**

**All hospitalized individuals at risk for pressure ulcers should have a systematic skin inspection at least daily and those in long term care at least once a week.**

The study was completed in University of Lahore Teaching Hospital and Bahria International Hospital Lahore Pakistan, in which 130 participants were included. Out of these 130 participants, in the first question 29(22.3%) respondents were Strongly Disagree, 22(16.9 %) were Disagree, 22(16.9%) were neutral, 23(17.7%) were Agree and 34

(26.2%) were strongly agree about the question. The high rate of respondents which are 34 are strongly agree were well knowledge, who knew about the pressure ulcer and its prevention. On the other hand most of the respondents were fall into neutral level, its mean they had no knowledge regarding this. Furthermore 29 (22.3%) respondents had also poor knowledge about pressure ulcer

**All hospitalized individuals at risk for pressure ulcers should have a systematic skin inspection at least daily and those in long term care at least once a week.**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 29 | 22.3 |
| Disagree | 22 | 16.9 |
| Neutral | 22 | 16.9 |
| Agree | 23 | 17.7 |
| Strongly agree | 34 | 26.2 |
| Total | 130 | 100.0 |



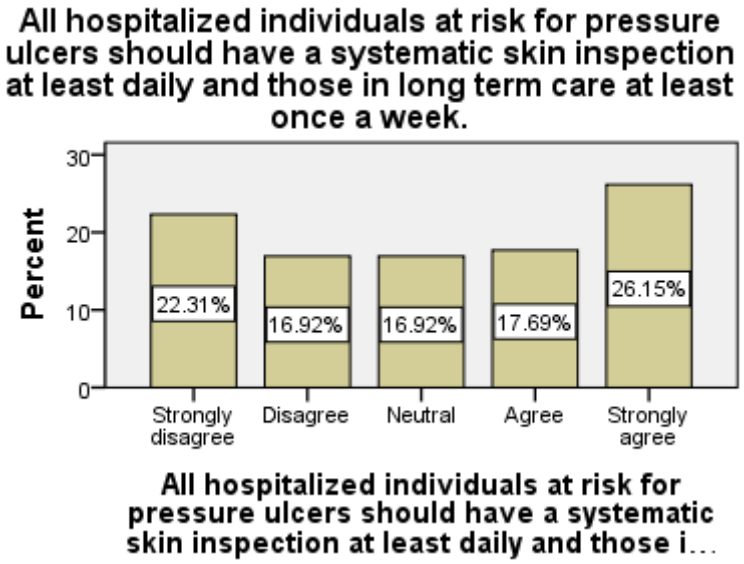



*FIGURE 6*

**The first sign of pressure ulcer development is open sore**

The second question show that 29(22.3%) respondents were Strongly Disagree, 23(17.7 %) were Disagree, 21(16.2%) were neutral, 24(18.5%) were Agree and 33 (25.4%) was strongly agree about the question. The response of question shows that most of the nurses were know about The first sign of pressure ulcer development is open sore but some of them were did not know enough about the about the question because 29(22.3%) and 23(17.7 %) were also respondents where they were unaware.

**Table 2**

**The first sign of pressure ulcer development is open sore**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 29 | 22.3 |
| Disagree | 23 | 17.7 |
| Neutral | 21 | 16.2 |
| Agree | 24 | 18.5 |
| Strongly agree | 33 | 25.4 |
| Total | 130 | 100.0 |



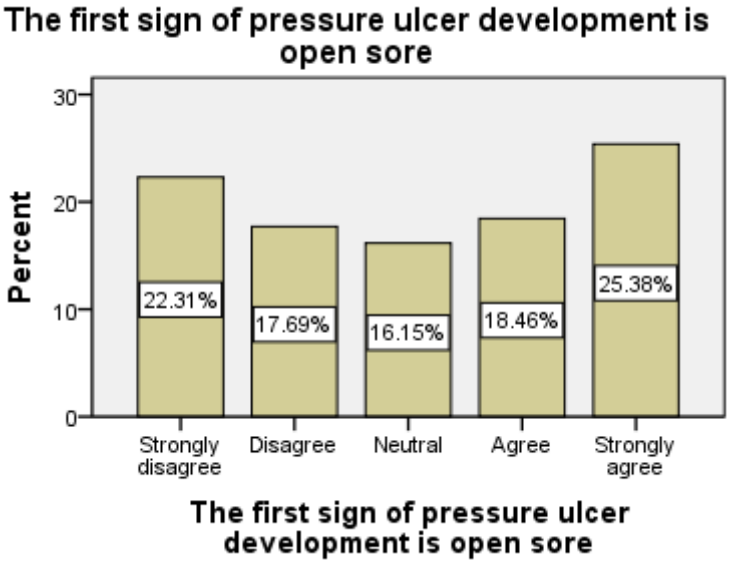



*FIGURE 7*

**It is important to massage over bony prominence**

Table and Figure number 3 show that out of 130 participants, 29 ( 22.3%) participants responded to strongly disagree and 22(16.9%) were response to disagree having negative response for this statement. This mean that they have no knowledge about prevention of pressure ulcer, 21 (16%) respondents were neutral about this question. And 24(18.5%)) respondents were agree and 34 (26.2%) were strongly agree. These mean that most of the respondent have more knowledge about pressure ulcer.



**Table 3**

**It is important to massage over bony prominence**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 29 | 22.3 |
| Disagree | 22 | 16.9 |
| Neutral | 21 | 16.2 |
| Agree | 24 | 18.5 |
| Strongly agree | 34 | 26.2 |
| Total | 130 | 100.0 |

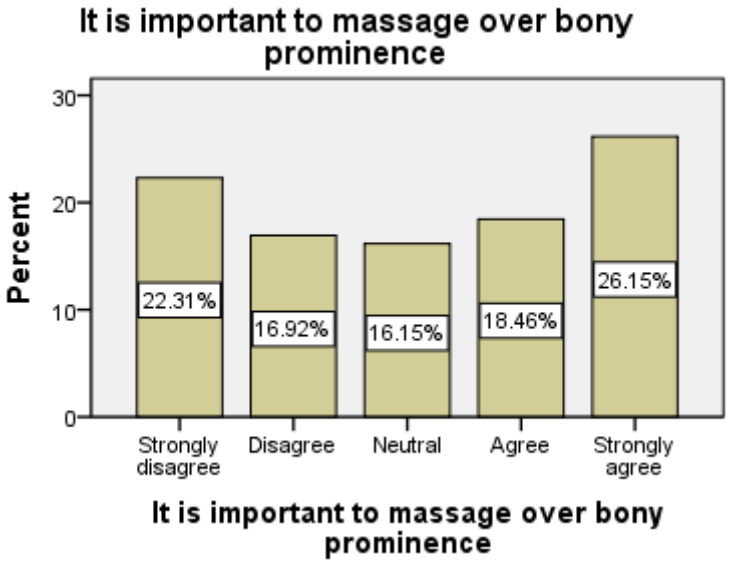



*FIGURE 8*

**Hot water and soap may dry the skin and increase the risk for pressure ulcers**

Table and Figure number 4 show that out of 130 participants, 31 ( 23.8 %) participants responded to strongly disagree and 27(20.8%) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Hot water and soap may dry the skin and increase the risk for pressure ulcers, 15 (11.5%)

respondents were neutral about this question. And 25(19.2%)) respondents were agree and 32 (24.6%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement.

**Table 4**

**Water and soap may dry the skin and increase the risk for pressure ulcers**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 31 | 23.8 |
| Disagree | 27 | 20.8 |
| Neutral | 15 | 11.5 |
| Agree | 25 | 19.2 |
| Strongly agree | 32 | 24.6 |
| Total | 130 | 100.0 |

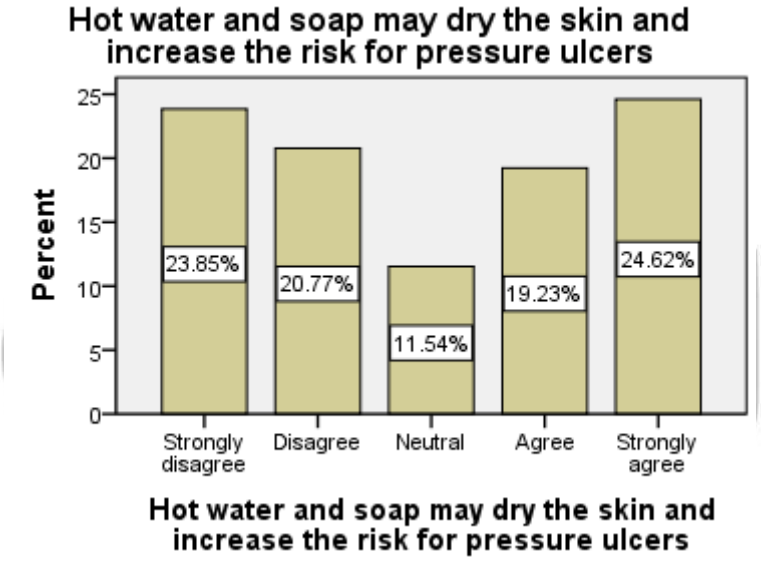



*FIGURE 9*

**Adequate dietary intake of protein and calories should be maintained during illness**

Table and Figure number 5 show that out of 130 participants, 32(24.6%) participants responded to strongly disagree and 30(23.1%) were response to disagree having negative response for this statement. 39 (30.0%) respondents were neutral about this question. And 14 (10.8%)) respondents were agree and 15 (11.5%) were

strongly agree. The result of this statement adequate dietary intake of protein and calories should be maintained during illness show that mostly nurses have no knowledge.

**Table 5**

**Adequate dietary intake of protein and calories should be maintained during illness**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 32 | 24.6 |
| Disagree | 30 | 23.1 |
| Neutral | 39 | 30.0 |
| Agree | 14 | 10.8 |
| Strongly agree | 15 | 11.5 |
| Total | 130 | 100.0 |

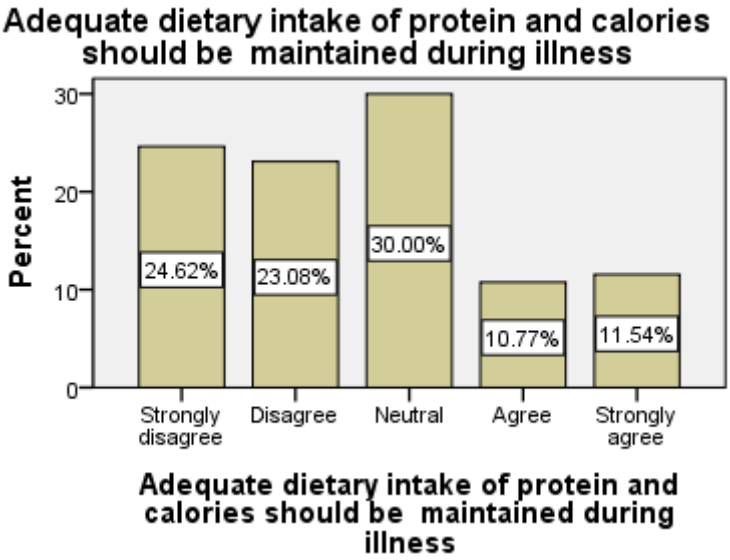



*FIGURE 10*

**Vitamin C & E are important to maintain skin integrity**

Table and Figure number 6 show that out of 130 participants, 32(24.6%) participants responded to strongly disagree and 28 (21.5.%) were response to disagree having negative response for this statement. 15 (11.5%) respondents were neutral about this question. And 24 (18.5%)) respondents were agree and 31 (23.8%) were strongly agree. The result show that negative response of the majority nurses towards Vitamin C & E is important to maintain skin integrity

**Table 6**

**Vitamin C & E are important to maintain skin integrity**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 32 | 24.6 |
| Disagree | 28 | 21.5 |
| Neutral | 15 | 11.5 |
| Agree | 24 | 18.5 |
| Strongly agree | 31 | 23.8 |
| Total | 130 | 100.0 |

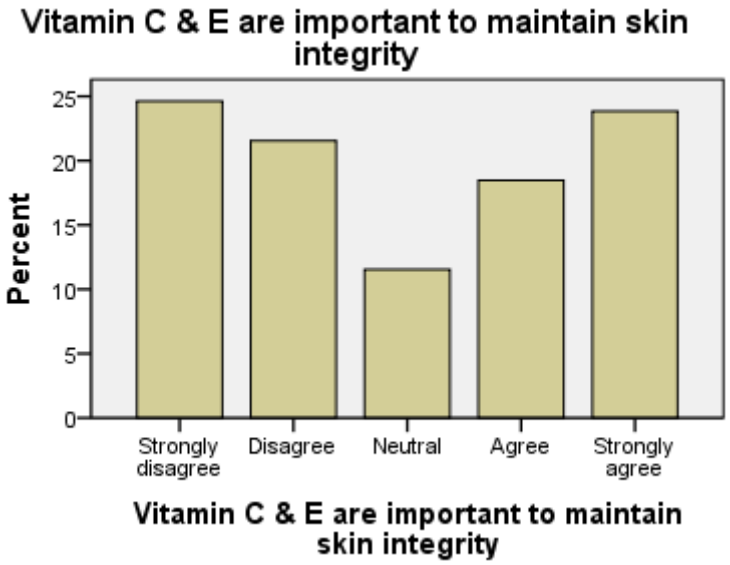



***FIGURE 11***

**Persons confined to bed should be repositioned every three hours**

Table and Figure number 7 show that out of 130 participants, 31 ( 23.8 %) participants responded to strongly disagree and 33 (25.4%) were response to disagree having negative response for this statement. This mean that majority of nurses have no knowledge about Persons confined to bed should be repositioned every three hours, 18 (13.8%) respondents were neutral about this question. And 22(16.9%)) respondents were agree and 20 (20.0%)) were strongly agree. These mean that a very less respondent have knowledge about this statement.

## Table 7

**Persons confined to bed should be repositioned every three hours**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 31 | 23.8 |
| Disagree | 33 | 25.4 |
| Neutral | 18 | 13.8 |
| Agree | 22 | 16.9 |
| Strongly agree | 26 | 20.0 |
| Total | 130 | 100.0 |

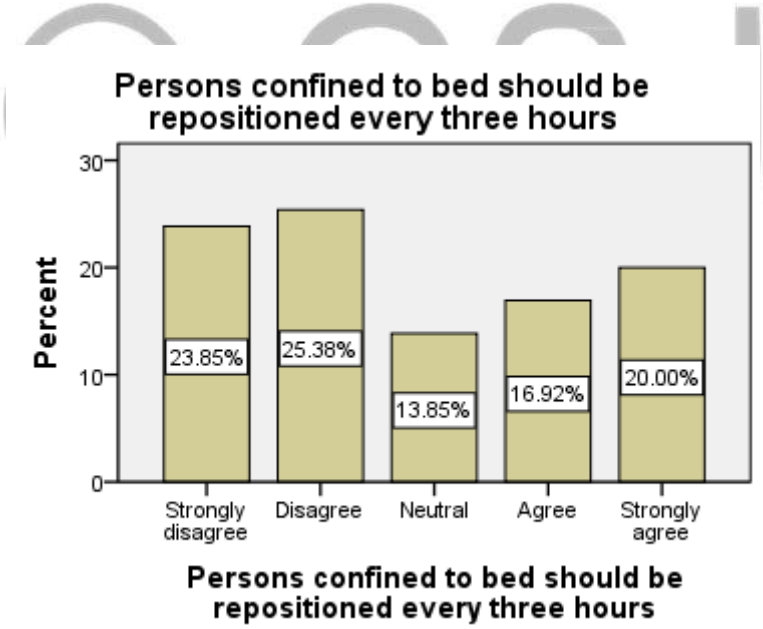


***FIGURE 12***

**A turning schedule should be written and placed at the bed side**

Table and Figure number 8 show that out of 130 participants, 13(10.0%) participants responded to strongly disagree and 34 (26.2%) were response to disagree having negative response for this statement. 31 (23.8%) respondents were neutral about this question. And 28 (21.5%)) respondents were agree and 24 (18.5%) were strongly agree. The result of this statement, A turning schedule should be written and placed at the bed side show that mostly nurses have more knowledge.



**Table 8**

**A turning schedule should be written and placed at the bed side**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 13 | 10.0 |
| Disagree | 34 | 26.2 |
| Neutral | 31 | 23.8 |
| Agree | 28 | 21.5 |
| Strongly agree | 24 | 18.5 |
| Total | 130 | 100.0 |

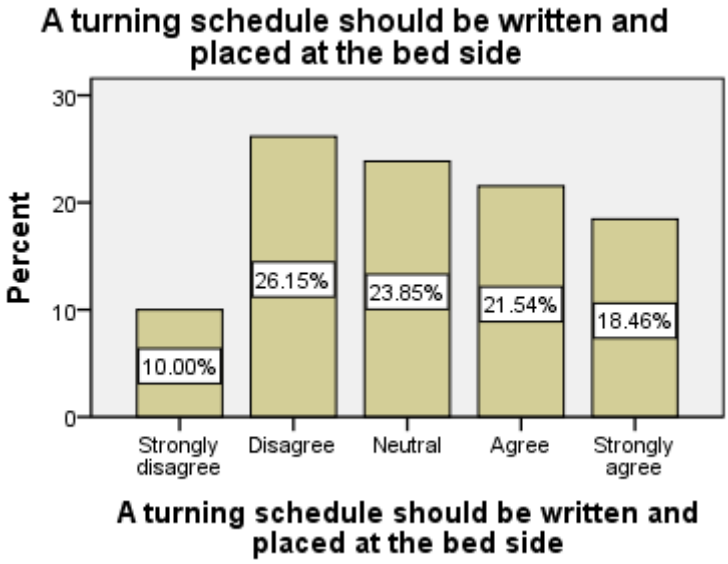



*FIGURE 13*

**The head of the bed should be maintained at the lowest degree of elevation (Hopefully no higher than a 30 degree angle) consistent with medical condition**

Table and Figure number 9 show that out of 130 participants, 16 ( 13.8 %) participants responded to strongly disagree and 24 (18.5%) were response to disagree having negative response for this statement. This mean that some nurses have now knowledge about the head of the bed should be maintained at the lowest degree of elevation (Hopefully no higher than a 30 degree angle) consistent with medical condition, 25 (19.2%) respondents were neutral about this question. And 28 (21.5%)) respondents were agree and 35 (26.9 %) were strongly agree. These mean that more respondent have more knowledge about this statement.

**Table 9**

**The head of the bed should be maintained at the lowest degree of elevation (Hopefully no higher than a 30 degree angle) consistent with medical condition**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 18 | 13.8 |
| Disagree | 24 | 18.5 |
| Neutral | 25 | 19.2 |
| Agree | 28 | 21.5 |
| Strongly agree | 35 | 26.9 |
| Total | 130 | 100.0 |

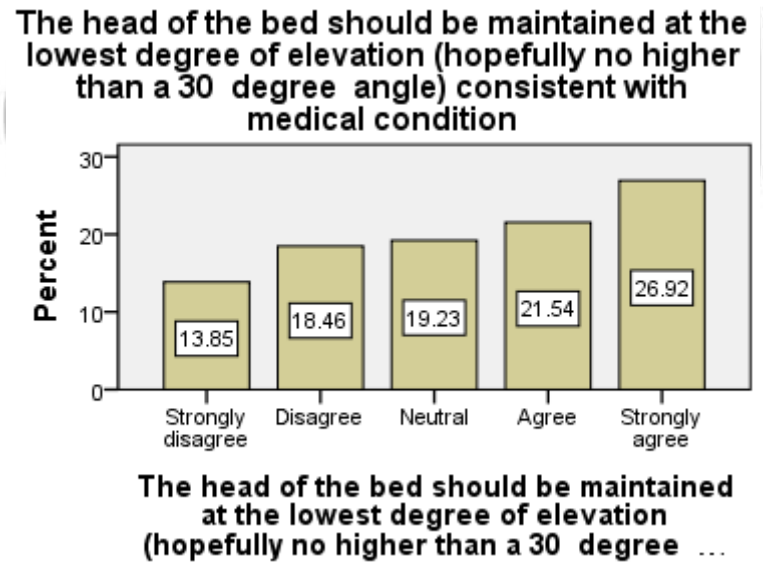



*FIGURE 14*

**A person who cannot move him or herself should be repositioned every two hourly while sitting in a chair**

Table and Figure number 10 show that out of 130 participants, 14(10.8%) participants responded to strongly disagree and 28 (21.5%) were response to disagree having negative response for this statement. 19 (14.6 %) respondents were neutral about this question. And 31 (23.8%)) respondents were agree and 38 (29.2%) were strongly agree. The result of this statement A person who cannot move him or herself should be repositioned every two hourly while sitting in a chair show that mostly nurses have more knowledge.



**Table 10**

**A person who cannot move him or herself should be repositioned every two hourly while sitting in a chair**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 14 | 10.8 |
| Disagree | 28 | 21.5 |
| Neutral | 19 | 14.6 |
| Agree | 31 | 23.8 |
| Strongly agree | 38 | 29.2 |
| Total | 130 | 100.0 |

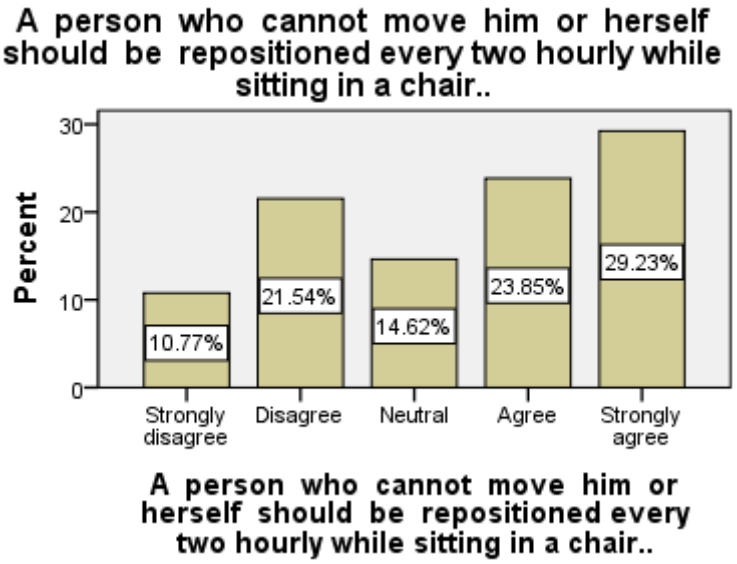



*FIGURE 15*

**Educational programs may reduce the incidence of pressure ulcers**

Table and Figure number 11 show that out of 130 participants, 13 ( 10.0 %) participants responded to strongly disagree and 25 (19.2 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Educational programs may reduce the incidence of pressure ulcers, 28 (21.5%) respondents were neutral about this question. And 27(20.8%)) respondents were agree and 37 (28.5%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement.

**Educational programs may reduce the incidence of pressure ulcers**

**Table 11**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 13 | 10.0 |
| Disagree | 25 | 19.2 |
| Neutral | 28 | 21.5 |
| Agree | 27 | 20.8 |
| Strongly agree | 37 | 28.5 |
| Total | 130 | 100.0 |

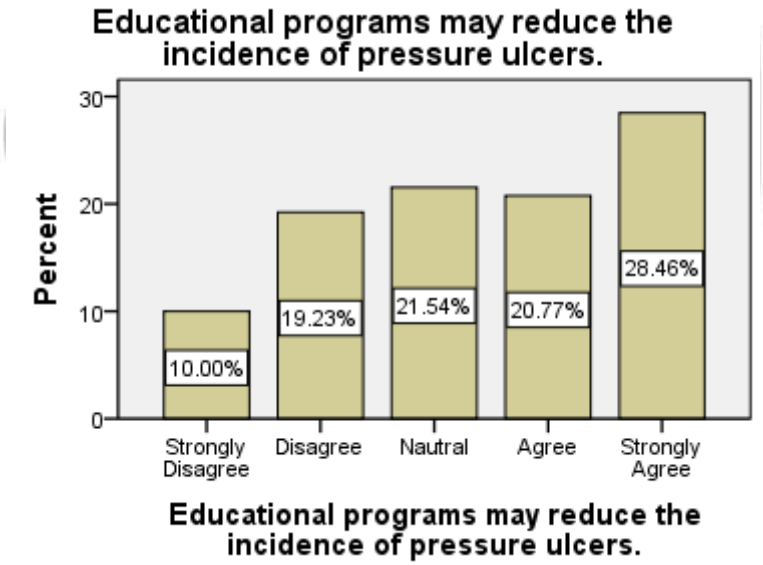



*FIGURE 16*

**All individuals should be assessed on admission to a hospital for risk of pressure ulcer development**

Table and Figure number 12 show that out of 130 participants, 14(10.8 %) participants responded to strongly disagree and 19 (14.6 %) were response to disagree having negative response for this statement. 23(17.7%) respondents were neutral about this question. And 32 (24.6%)) respondents were agree and 42 (32.3%) were strongly agree. The result show that positive response of the majority nurses towards, All individuals should be assessed on admission to a hospital for risk of pressure ulcer development



**Table 12**

**All individuals should be assessed on admission to a hospital for risk of pressure ulcer development**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 14 | 10.8 |
| Disagree | 19 | 14.6 |
| Neutral | 23 | 17.7 |
| Agree | 32 | 24.6 |
| Strongly agree | 42 | 32.3 |
| Total | 130 | 100.0 |

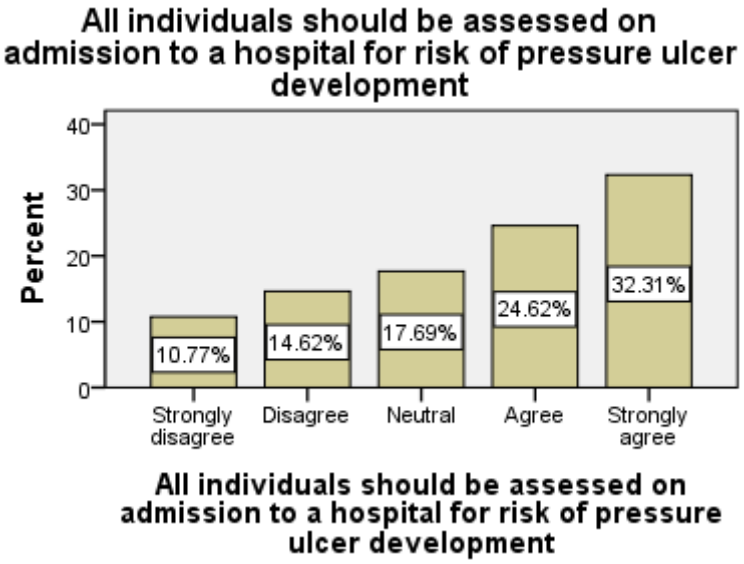



*FIGURE 17*

**Patient skin should be clean and dry to prevent risk of pressure ulcer development**

Table and Figure number 13 show that out of 130 participants, 12(9.2 %) participants responded to strongly disagree and 22 (16.9%) were response to disagree having negative response for this statement. 26 (20.0%) respondents were neutral about this question. And 33 (25.4%)) respondents were agree and 37 (28.5%) were strongly agree. The result of this statement, Patient skin should be clean and dry to prevent risk of pressure ulcer development show that more nurses have knowledge.

**Table 13**

**Patient skin should be clean and dry to prevent risk of pressure ulcer development**

| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 12 | 9.2 |
| Disagree | 22 | 16.9 |
| Neutral | 26 | 20.0 |
| Agree | 33 | 25.4 |
| Strongly agree | 37 | 28.5 |
| Total | 130 | 100.0 |

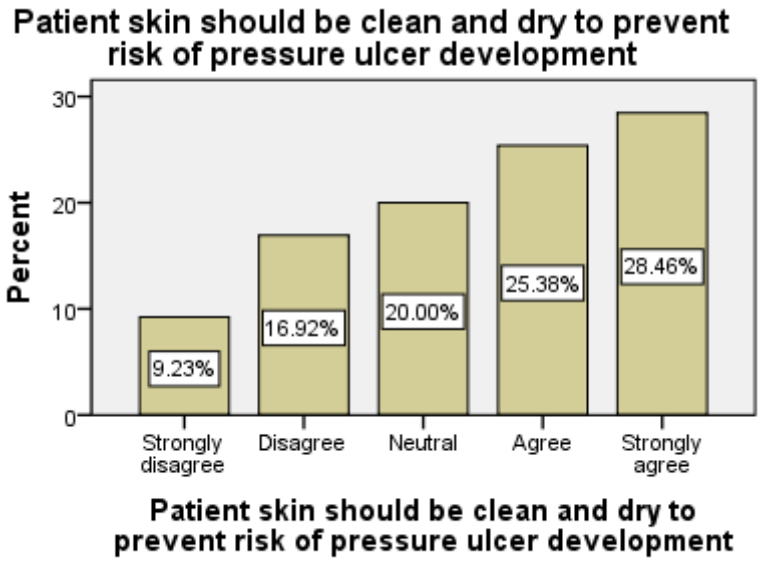



*FIGURE 18*

**Serum albumin test is the appropriate laboratory test for nutritional assessment of pressure ulcer patient**

Table and Figure number 14 show that out of 130 participants, 11 ( 8.5 %) participants responded to strongly disagree and 27 (20.8 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Serum albumin test is the appropriate laboratory test for nutritional assessment of pressure ulcer patient, 14 (10.8%) respondents were neutral about this question. And 37(28.5 %)) respondents were agree and 41 (31.5%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement

**Table 14**

**Serum albumin test is the appropriate laboratory test for nutritional assessment of pressure ulcer patient**



| | Frequency | Percent |
|---|---|---|
| Strongly disagree | 11 | 8.5 |
| Disagree | 27 | 20.8 |
| Neutral | 14 | 10.8 |
| Agree | 37 | 28.5 |
| Strongly agree | 41 | 31.5 |
| Total | 130 | 100.0 |

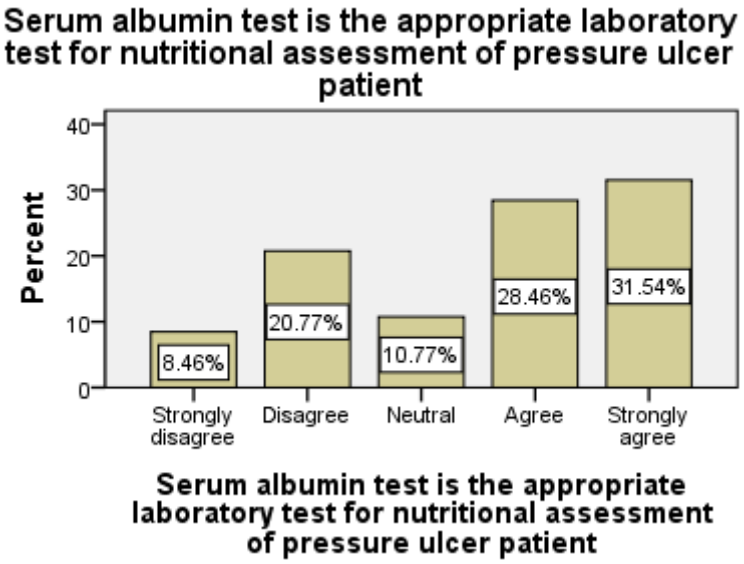



*FIGURE 19*

**Heel ulcer is prevented by putting pillow under the patient's leg.**

Table and Figure number 15 show that out of 130 participants, 12 ( 9.2 %) participants responded to strongly disagree and 32 (24.6 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Heel ulcer is prevented by putting pillow under the patient's leg, 13 (10.0%) respondents were neutral about this question. And 34 (26.2 %)) respondents were agree and 39 (30.0%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement

**Table 15**

**Heel ulcer is prevented by putting pillow under the patient's leg.**

| | Frequency | Percent |
|---|---|---|
| Strongly Disagree | 12 | 9.2 |
| Disagree | 32 | 24.6 |
| Neutral | 13 | 10.0 |
| Agree | 34 | 26.2 |
| Strongly agree | 39 | 30.0 |
| Total | 130 | 100.0 |

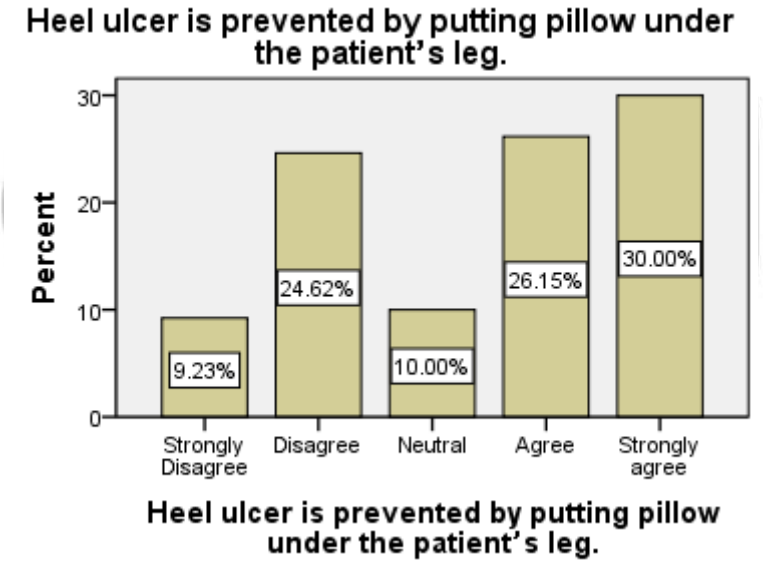



*FIGURE 20*

**For people who have incontinence should be clean at the time of soiling and at routine intervals.**

Table and Figure number 16 show that out of 130 participants, 12 ( 9.2 %) participants responded to strongly disagree and 33 (25.4 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about, For person who have incontinence should be clean at the time of soiling and at routine intervals, 28 (21.5 %) respondents were neutral about this question. And 25 (19.2 %)) respondents were agree and 32 (24.6 %)) were strongly agree. These mean that most of the respondent has more knowledge about this statement

**Table 16**

**For person who have incontinence should be clean at the time of soiling and at routine intervals.**



| | Frequency | Percent |
|---|---|---|
| Strongly Disagree | 12 | 9.2 |
| Disagree | 33 | 25.4 |
| Neutral | 28 | 21.5 |
| Agree | 25 | 19.2 |
| Strongly Agree | 32 | 24.6 |
| Total | 130 | 100.0 |

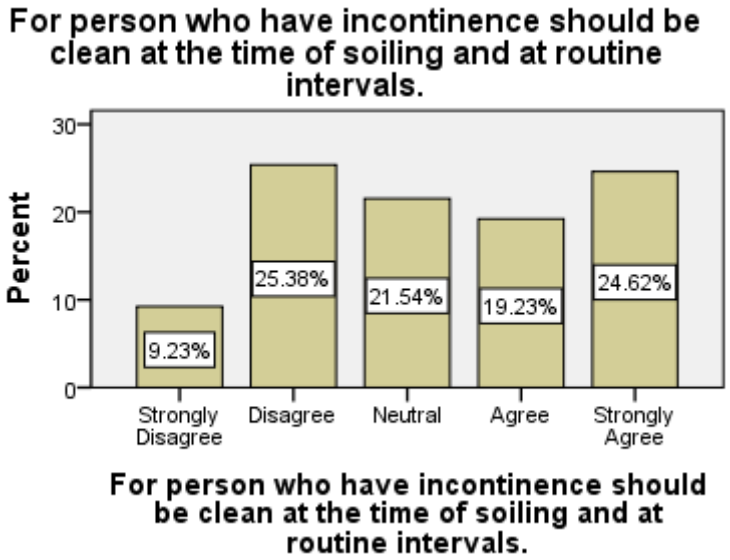



*FIGURE 21*

**A low-humidity environment may predispose a person to pressure ulcers**

Table and Figure number 17 show that out of 130 participants, 12 (9.2 %) participants responded to strongly disagree and 32 (24.6 %) were response to disagree having negative response for this statement. 34 (26.2 %) respondents were neutral about this question. And 34 (26.2%) respondents were agree and 34 (26.2%) were strongly agree. The result of this statement, a low-humidity environment may predispose a person to pressure ulcers show that nurses have more knowledge

**Table 17**

**A low-humidity environment may predispose a person to pressure ulcers**

| | Frequency | Percent |
|---|---|---|
| Strongly Disagree | 12 | 9.2 |
| Disagree | 32 | 24.6 |
| Neutral | 18 | 13.8 |
| Agree | 34 | 26.2 |
| Strongly Agree | 34 | 26.2 |
| Total | 130 | 100.0 |

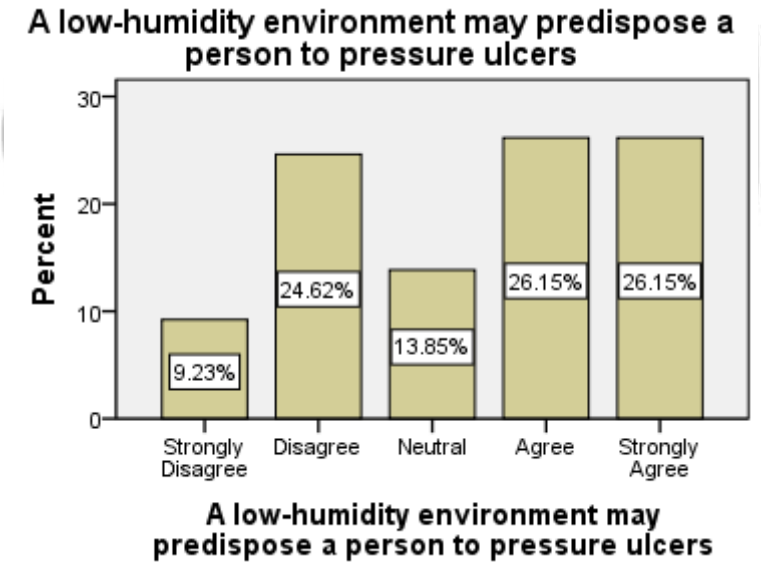



*FIGURE 22*

**Risk factors of pressure ulcer are immobility, incontinence, impaired nutrition and altered level of consciousness**

Table and Figure number 18 show that out of 130 participants, 10 ( 7.7 %) participants responded to strongly disagree and 17 (13.1 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Risk factors of pressure ulcer are immobility, incontinence, impaired nutrition and altered level of consciousness, 36 (27.7%) respondents were neutral about this question. And 22 (16.9 %)) respondents were agree and 45 (34.6%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement



**Table 18**

**Risk factors of pressure ulcer are immobility, incontinence, impaired nutrition and altered level of consciousness**

| | Frequency | Percent |
|---|---|---|
| Strongly Disagree | 10 | 7.7 |
| Disagree | 17 | 13.1 |
| Neutral | 36 | 27.7 |
| Agree | 22 | 16.9 |
| Strongly Agree | 45 | 34.6 |
| Total | 130 | 100.0 |

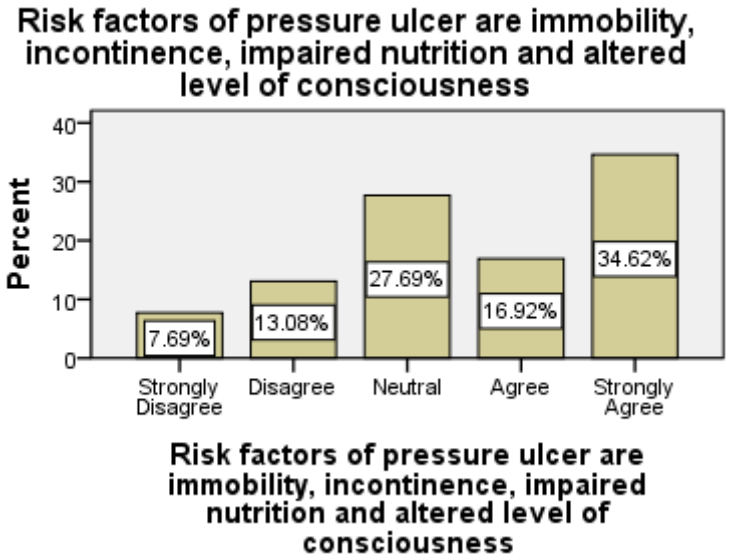



*FIGURE 23*



## DISCUSSION:

The current cross-sectional study sought out the score of knowledge included 130 nurses including male and female aging between 20-40 years from the UOLTH and BIHL Lahore. The aim of the study was to describe how RN perform, document and reflect on PU prevention in a specific nurse-patient care situation as well as generally on hospital wards

The aim of this study was to determine the knowledge level and reported practice patterns of nurses related to identification and care of PUs. The results of this investigation will contribute to our

understanding of nurses' knowledge about PU. According to this study most of the participants were aware and have good knowledge but they have some misconception about preventive measure. In this study result of this variable, The first sign of pressure ulcer development is open sore show that29(22.3%) respondents were Strongly Disagree, 23(17.7 %) were Disagree, 21(16.2%) were neutral, 24(18.5%) were Agree and 33 (25.4%) were strongly agree. The response of question shows that most of the nurses were more knowledge but some of them were did not know enough about the question because 29(22.3%) and 23(17.7 %) were also respondents where they were unaware.

Nurses who took formal training on pressure ulcer prevention were found to have good knowledge than those who had not. Similarly in a study conducted in Swedish healthcare to assess knowledge, attitude and practice of nursing staff on pressure ulcer prevention; nurses who had training were more knowledgeable than those who did not. This might be due to the fact that training increases the chance of the trainees to get up to date information about pressure ulcer related preventions. (Källman U, Suserud B.( 2014)

In this study out of 130 participants, 16 (13.8 %) participants responded to strongly disagree and 24 (18.5%) were response to disagree having negative response for this statement. This mean that some nurses have now knowledge about the head of the bed should be maintained at the lowest degree of elevation (Hopefully no higher than a 30 degree

angle) consistent with medical condition, 25 (19.2%) respondents were neutral about this question. And 28 (21.5%)) respondents were agree and 35 (26.9 %) were strongly agree. These mean that more respondent have more knowledge about this statement.

In this study out of 130 participants, 14(10.8%) participants responded to strongly disagree and 28 (21.5%) were response to disagree having negative response for this statement. 19 (14.6 %) respondents were neutral about this question. And 31 (23.8%)) respondents were agree and 38 (29.2%) were strongly agree. The result of this statement **A person who cannot move him or herself should be repositioned every two hourly while sitting in a chair** show that mostly nurses have more knowledge. But in contrast another study conducted in Bangladesh which result shows that nurse's knowledge about factors related to pressure ulcer, was at very low to low level. But the study of Uganda revealed that nurses knowledge about frequent patient positioning can protect patient from pressure ulcers was (98.2%), risk factors which can cause pressure ulcer in bedridden patient (Shrestha, R. 2017).

In this study out of 130 participants, 29 (22.3%) participants responded to strongly disagree and 22(16.9%) were response to disagree having negative response for this statement. This mean that they have no knowledge about prevention of pressure ulcer, 21 (16%) respondents were neutral about **It is important to massage over bony**

**prominence**. And 24(18.5%)) respondents were agree and 34 (26.2%) were strongly agree. These mean that most of the respondent have more knowledge about pressure ulcer.

The other stud conducted in Ethiopia describe that nurses considered that massaging is an important part of pressure ulcer prevention care (Werku, E. 2015). However, the participants explained massage as a preventive intervention although the evidence advice against massage (Abyu, G 2016). The study conducted in Ethiopia result found that what nurses mostly not practiced to prevent Pressure ulcer that is Attending seminars to prevent Pressure ulcer (49.7%), using assessment scale to assess PU (56.2%) and using air bed for at high risk patient (44.1%).

In this study out of 130 participants, 29(22.3%) respondents were Strongly Disagree, 22(16.9 %) were Disagree, 22(16.9%) were neutral, 23(17.7%) were Agree and 34 (26.2%) were strongly agree about the **All hospitalized individuals at risk for pressure ulcers should have a systematic skin inspection at least daily and those in long term care at least once a week**. The high rate of respondents which are 34 are strongly agree were well knowledge, who knew about the pressure ulcer and its prevention. On the other hand most of the respondents were fall into neutral level, its mean they had no knowledge regarding this. Furthermore 29 (22.3%) respondents had also poor knowledge about pressure ulcer (Lola, N.2015)

According to Bangladesh study results knowledge about the use of the risk assessment scale for pressure ulcers was only 12.1% (Ilyas N 2016), and in this study results it was (37.2%). Even though study shows that our result regarding Braden scale are better as compared with Bangladesh study results but fact is that nurses were not have sufficient knowledge about the use of advance measures of pressure ulcer prevention. (Ilyas N 2016),

According to the South East findings, nurses' levels of knowledge were insufficient. Using the same questionnaire previously assessed Iranian critical care nurses' knowledge about pressure ulcers, similarly finding that critical care nurses were not knowledgeable about pressure ulcers (Zeb, A 2016)

In this study out of 130 participants, 13 (10.0 %) participants responded to strongly disagree and 25 (19.2 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Educational programs may reduce the incidence of pressure ulcers, 28 (21.5%) respondents were neutral about this question. And 27(20.8%)) respondents were agree and 37 (28.5%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement.

This study finding shows that nurses practices are poor(36%) in order to give pressure ulcer prevention education to patient's and caregivers but the study conducted in Aydr referral hospital result shows that

nurses practices regarding education of patients and care givers were 90.1% which was much higher than us.

In previous study on average, in the questionnaire, students correctly answered 77.3 percent of the items. There was a strong positive association between the mean knowledge score of the students and their age (P=0.004, relative risk [rr] =0.299) and their mean knowledge score and the number of completed academic semesters (P=0.253, rr=0.016). Although the mean information score of male students was marginally higher than that of female students, the difference was not statistically significant (P=0.163). Independent t-tests showed that the mean information score was not significantly higher than other students for students who participated in a PU workshop (P=0.502). Awareness of PU characteristics (P=0.649) by female students.



Rafiei et al (2019) used Pieper's nursing knowledge questionnaire. Senior nursing students were among the 133 participants from two nursing schools (semesters seven and eight). Their level of awareness was found to be lower than in the current study; 67.1 percent of the 41 items were answered correctly by participants and had lower scores for all three fields (onset: 77.8 percent ; characteristics: 49.6 percent ; and prevention measures: 69.5 percent ). (Rafiei et al 2014) A similar tool was used by Simonetti et al (2015) to research the awareness of 742 nursing students from seven nursing colleges in Italy. They found that

there was a lower degree of PU awareness for students than in the present sample. (rafie 2019).

The results of this study show that out of 130 participants, 10 ( 7.7 %) participants responded to strongly disagree and 17 (13.1 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Risk factors of pressure ulcer are immobility, incontinence, impaired nutrition and altered level of consciousness, 36 (27.7%) respondents were neutral about this question. And 22 (16.9 %)) respondents were agree and 45 (34.6%)) were strongly agree. These mean that most of the respondent has more knowledge about this statement

Another s study showed that 38.8% of nurses had inadequate knowledge about pressure ulcer prevention practice. This is less than a study done in Bangladesh, where 57.8% of nurses had inadequate knowledge, and in Jordan, where 73% of nurses had inadequate knowledge about pressure ulcer prevention . The possible explanation could be lack of trainings and evidences supported by research. (S. Islam 2010).

The results of this show that out of 130 participants, 12 ( 9.2 %) participants responded to strongly disagree and 32 (24.6 %) were response to disagree having negative response for this statement. This mean that some nurses have no knowledge about Heel ulcer is

prevented by putting pillow under the patient's leg, 13 (10.0%) respondents were neutral about this question. And 34 (26.2 %)) respondents were agree and 39 (30.0%)) were strongly agree. These mean that most of the respondent have more knowledge about this statement

## LIMITATIONS, STRENGTH AND IMPLICATIONS OF THE SUDY

### LIMITATIONS OF THE STUDY

- The data are from self-report questionnaires which may not accurately reflect clinical practice (observational method was selective)
- Cross sectional method of the study used
- This study conducted in just on private hospitals.

### Limitation

- Training programs should be conducted about pressure ulcer prevention for nurses who are working in both hospital.
- Results of the study should be disseminated and shared with the administration including nurse administrator, hospital administration.
- Knowledge of nurses regarding pressure ulcer prevention not only enough without utilization of standards protocols into practices while caring of patients**.**

**STRENGTH OF THE STUDY**

- This study provide the current base line data of nurses knowledge for pressure ulcer prevention which will be helpful for improvement of nursing care regarding pressure ulcer prevention in both Hospital.
- A valid questionnaire used for this study.

# CONCLUSION

This study was conducted to assess level of nurses' knowledge towards pressure ulcer prevention. Generally, the study showed that working experience had a significant association with nurses Practices and knowledge at both ULTH and BIHL hospital. Education can bring a change in individual behavior so change in knowledge can influence the practices. So nurses need to get continuing education and training about pressure ulcer prevention that will enhance their knowledge and practices can be improved. Further researches about pressure ulcer prevention are needed.

# RECOMMENDATIONS

Nurses are the backbone of every health care organization and patient's care totally depend on nursing care. It is necessary for health care organizations to improve their nursing services in respect to fulfil the patients need. It is recommended that it is

important for every health organization to arrange nursing seminar and workshop about good quality of nursing care about pressure ulcer and motivate the nurse to provide better care to the patient which can protect the patient from pressure ulcer.

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# Appendix

## Consent Form

### PREVALANCE AND MATERNAL RISK FACTORS RELATED TO PRETERM BIRTH IN ANY PARITY OF SERVICES HOSPITAL LAHORE.

### Government College University Faisalabad

I ……..……, wife of……Hereby, fully agree to contribute in the above mentioned study. My designation is……I understand that the study is designed to assess the prevalence and risk factors of preterm birth among primigravida women. I have been informed about the nature of the participation and possible risks and /discomfort involved. I have the opportunity to ask the question about the study and I agree to give my response as requested by the researcher (MS Sehrish Arshad). I have no objection in case the data obtained from my investigation is published in research publication while maintain confidentiality.



Date……..

… …… ……

DR. Asif Hanif MS. Aasma Nazir

Signature of Participant

The Supervisor The Researcher

# CONSENT FORM (ENGLISH):

**Description of the Research and Your Participation**

You are invited to participate in a research study conducted by Miss AasmaNazir related to Assessment of Knowledge of nurses about Prevention of Pressure Ulcer at private hospital in Lahore

**Risks and Discomforts**

There are no known risks associated with this informative scale.

**Protection of Confidentiality**
We will do everything we can to protect your privacy. Your identity will not be revealed in any publication resulting from this study.

**Right to withdraw**
Your participation is voluntary and you can answer only those questions that you are comfortable with.
You will not be penalized in any way should you decide not you participate or to withdraw from this study.

Contact Information: If you have any questions or concerns about the study or if any problem arise, please contact AasmaNazir :0300 0693433

**Documenting Consent**:

My signature below indicates that I have read and understand the description provided. I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records. Name of Participant Signature Date _____ _____ Researcher's Signature Date .**A copy of this consent will be left with you, and a copy will be taken by the researcher**



# CONSENT FORM (URDU):

ریسرچ سٹڈی میں شرکت کا دعوت نامہ شمولیت کی دعوت دیتا /دیتی ہوں

**نقصانات اور تکلیف :** اس تحقیق سے کسی قسم کے نقصان یا تکلیف کا اندیشہ نہیں ہے ۔

**رازداری کا تحفظ :** ہم آپ کی معلومات کے تحفظ کے لیے وہ سب کچھ کریں گے جو ہم کر سکتے ہیں۔ تحقیق کے متعلق اکٹھی کیی گیی تمام معلومات کو انتہا ئی خفیہ رکھا جاے گا۔ ڈیٹا انٹری اور تجزیے کے دوران آپ کے متعلق وہ تمام معلومات جن سے آپ کی شناخت ہو سکتی ہو کو ختم کر دیا جاے گا۔ اس تحقیق کے نتیجے میں شائع ہونے والی کسی بھی اشاعت میں آپ کی شناخت کو ظاہر نہیں کیا جاے گا۔

**رضاکارانہ شمولیت :** اس تحقیقی مطالعہ میں آپ کی شرکت رضاکارانہ ہے۔ آپ کو شرکت نہ کرنے اور کسی بھی وقت بغیر وجہ بتانے اس تحقیق میں شمولیت کو

چھوڑنے کا اختیار ہے۔ شرکت نہ کرنے یا اس میں شمولیت کو چھوڑنے کی صورت
میں آپ کے خلاف کوئی کاروایی نہیں کی جاے گی

رابطےکیمعلومات :
اگرآپکواسمطالعےمینکوئیسوالاتیاخدشاتہینیااگرکوئیمسئلہپیداہوتوعاصمہنذیرسےرابطہکریں۔موبائل
03000693433

ریسرچکاعنوان : لاہورکےنجیاسپتالمینپریشرکےالسرکیروکتھامکےبارےمیننرسکےعلمکااندازہ

☐ میں سمجھ گیا/گیی ہوں کہ میری شرکت رضاکارانہ ہے اور یہ کہ میں کسی بھی وقت اپنا ارادہ بدل سکتا/سکتی ہوں اور تحقیق سے دستبردار ہو سکتا/سکتی

☐ میں سمجھ گیا /گیی ہوں کہ میرے جوابات خفیہ رکھے جاءیں گے۔ میں محقیقیین کو اس بات کی اجازت دیتا/دیتی ہوں کے وہ جوابات کو جانچ سکیں۔

☐ میں سممجھ گیا /گی ہوں کے معلومات میرے نام کے بجاے نمبر کی صورت میں محفوط کی جائیں گی۔ تا کہ میں نتائج کی اشاعت کے دوران کسی بھی طرح سے شناخت نہ کیا جا سکوں۔ میں اس بات سے رضامند ہوں کے جو معلومات مجھ سے لی جائہیں گی وہ تحقیق میں استعمال ہوں گی۔

☐ میں اوپر بتایی گی تحقیق میں شامل ہونے کے لیے رضامند ہوں اور محقیقین کو اپنا پتہ تبدیل ہونے کی صورت میں مطلع کروں گا /گی۔

**رضا مندی :** میں نے یہ اجازت نامہ پڑھا ہے اور مجھے سوال پوچھنے کا موقع دیا گیا ہے۔ میں اس سٹڈی میں شرکت کے راضی ہوں۔

شرکت کنندہ کا نام _____ دستخط _____ تاریخ _____

اجازت لینے والے کا نام _____ دستخط _____ تاریخ _____

اس اجازت نامہ کی ایک نقل آپکو دی جانی چاہے۔

**Demographic Data**

| | | | |
|---|---|---|---|
| **Gender** | ▪ **Male**<br>▪ **Female** | **Job experience** | < 1 Year<br>1-5 Years<br>6-10 Years<br>Above 10 Years |
| **Age** | 20-25 Years<br>26-30 Years<br>31-35 Years<br>36-40 Years | **Area ofworking** | Adult medical ward<br>Adult surgical ward<br>ICU<br>Others |
| **Qualification of the participants** | Gernal Nursing<br>Diploma + | | |

| | | | |
|---|---|---|---|
| | midwifery<br>BSN / Post RN<br>MSN | | |

**Variables of the study**

| S.N | Statement | S.D.Agree | D. Agree | Neutral | Agree | S.A |
|---|---|---|---|---|---|---|
| 1 | Risk factors of pressure ulcer are immobility, incontinence, impaired nutrition and altered level of consciousness. | | | | | |
| 2 | All hospitalized individuals at risk for pressure ulcersshould have a systematic skin inspection at least daily and those in long term care at least once a week. | | | | | |
| 3 | The first sign of pressure ulcer development is open sore | | | | | |
| 4 | It is important to massage over bony prominence | | | | | |
| 5 | Hot water and soap may dry the skin and increase the risk for pressure ulcers | | | | | |
| 6 | Adequate dietary intake of protein and calories should be maintained during illness | | | | | |
| 7 | Vitamin C & E are important to maintain skin integrity | | | | | |
| 8 | Persons confined to bed should be repositioned every three hours | | | | | |
| 9 | A turning schedule should be written and | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | placed at the bed side | | | | | |
| 10 | The head of the bed should be maintained at the lowest degree of elevation (hopefully no higher than a 30 degree angle) consistent with medical condition | | | | | |
| 11 | A person who cannot move him or herself should be repositioned every two hourly while sitting in a chair.. | | | | | |
| 12 | Educational programs may reduce the incidence of pressure ulcers. | | | | | |
| 13 | All individuals should be assessed on admission to ahospital for risk of pressure ulcer development | | | | | |
| 14 | Patient skin should be clean and dry to prevent risk ofpressure ulcer development | | | | | |
| 15 | Serum albumin test is the appropriate laboratory test fornutritional assessment of pressure ulcer patient | | | | | |
| 16 | Heel ulcer is prevented by putting pillow under the patient'sleg. | | | | | |
| 17 | For person who have incontinence should be clean at thetime of soiling and at routine intervals. | | | | | |
| 18 | A low-humidity environment may predispose a person topressure ulcers | | | | | |