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The Impact of Patient Demographics on Nurse-Patient Relationships in Healthcare Settings: Analyzing the Role of Age, Marital Status, and Educational Level

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Abstract

Patient's satisfaction is the main objective of any healthcare organization. Patients are the regular customers of healthcare organizations not once so we should satisfy them by fulfilling need wants and demand. As a single satisfied customer bringsthousands of other customers and patients are our customers. Patient satisfaction plays a vital rolein healthcare organization and medical research. Patient satisfaction is required to build trust in patients. As trust of patients towards hospital and healthcare providers depends on patient satisfaction. For this research, we took trust and how it affects nurse-patient relationship is the main theme of study. A nurse is a skilled healthcare professional who plays a vital role in caring for people who are sick, injured, or unable to care for themselves. A good nurse-patient relationship is required for proper treatment of the patient and care. The main purpose of this study is to investigate nurse-patient relationship in healthcare settings. Through this research we focused whether the nurse-patient relationship differs with the age, marital status, occupation, and education level of the patient. For this study, hypothesis was developed to investigate the nurse-patient relationship. A quantitative research strategy was adopted, and convenience sampling techniques were used to collect data from the patients. This study shows the nurse-patient relationship in healthcare settings.

Keywords: Patient satisfaction, Nurses, trust, nursing care, health care, service

Introduction

Background

Nurse behavior plays a significant role in building relationships with the patients in any health care institutions. It includes the human relationships and affects the quality of services and patient satisfaction (Wagle, Neupane, Nyaupane, & Timalsena, 2024). Patient satisfaction is the result of an assessment in the form of a response (feeling happy and satisfied) to the patient because of fulfillment of expectations in receiving nurse services. Patient satisfaction is an evaluation after using a service that the selected service at least meets the expectation of the patients and patient parties (Guo, et al., 2023).

Hospitals or any healthcare institutes have a very strategic role and efforts to accelerate the improvement of public health status (Adler, et al., 2003). The new generation of health care requires hospitals to provide quality services according to the needs and wishes of patients while still referring to the professional code of ethics (Neupane D. , 2014). At the hospital, the resources that contribute the most to supporting patient satisfaction, one of which is the nurse. The nurse influences much more to determine the quality of service provided by the healthcare organization. Nurses are as spread head of service to patient and their families in the hospital, because of the frequency of meetings with the most of frequent patient.

The study shows the relationship between the nurse and patients in a health care setting while the treatment procedures (Ritter, 2011). Nursing integrates the art and science of caring and focuses on the protection, promotion, and optimization of health and human functioning; prevention of illness and injury; facilitation of healing; and alleviation of suffering through compassionate presence. Nursing is the diagnosis and treatment of human responses and advocacy in the care of individuals, families, groups, communities, and populations in recognition of the connection of all humanity. The behavior and attitude of nurses is very important to increase the morale of a patient (Feo, Rasmussen, Wiechula, Conroy, & Kitson, 2024). The unique function of nurses in caring for individuals, sick or well, is to assess their responses to their health status and to assist them in the performance of those activities contributing to health or recovery or to dignified death that they would perform unaided if they had the necessary strength, will, o knowledge and to do this in such a way as to help them gain full of partial independence as rapidly as possible.

Several factors influence the nurse-patient relationship, including organizational settings, nurse behaviors, and patient expectations. Organizational conditions, especially in acute care settings, can either facilitate or hinder the development of therapeutic relationships (Neupane & Lourdusamy, 2024). Nurses in critical care settings are better positioned to form these relationships compared to those in general wards, who may experience moral distresss and withdraw from emotional engagement with patients. Additionally, both nurses and patients have specific expectations about the nature and importance of the caring relationship, which shapes their interaction with the patients during the treatment.

In context of Nepal, the numbers of nursing students are high (Neupane D. , 2019), but the nurse-patient ratio are not maintained according to the guidelines mentioned. The patient has got high expectation from the nurses. Generally, the patient expects good behavior, attitude (Neupane D. , 2014), respect, caring, empathy, and relationship of trust and help (Neupane D. , 2018). Nurses with a positive attitude are expected to provide good service, compassionate care for health customers, to be proud of their profession and able to hold intra and extra professional fact.

Problem Statement

Hospitals in Nepal comprises of the largest group of nurses which provide health care services and have a crucial role in the realization of an effective health services. Patient in all hospitals have certain idea, belief, or some kind of image of nurses towards patient. Since, the nurses play important role on the treatment of every patient in the hospitals so, it is important to examine the behavior of nurses towards the patient.

This research addresses the following issues:

- Is there a relationship between nurse's caring behavior and the level of patient satisfaction in healthcare settings?
- What role does nurses plays in providing good health facilities to patients?
- Does good relationship between patient and nurses provides better outcomes or productivity?

Significance of the Study

Nurse care towards patient plays an important role to upgrade the patient flow in health care sectors. The study of Nurse-patient relationship in healthcare settings has been rarely conducted. This research paper will be beneficial to hospitals and other health care sectors to improve the quality of care and to increase the efficiency of various resources. This study is important for the Profession of Nursing to meet its social obligation to provide a "caring relationship" in which our services are given we must explore what constitutes a caring relationship for our patients in a hospital.

Objectives

The specific objectives of the study are:

- To explore the relationship between age and behavior of nurse towards patient.
- To assess the relationship between marital status and behavior of nurse towards patient.
- To measure the relationship between educational level and behavior of nurse towards patient.

Research Hypothesis

Based on the objectives of the study following hypothesis has been proposed for the study of null hypothesis in this study:

H1: There is significant relationship between age and nurse-patient relationship in healthcare settings.

H2: There is significant relationship between marital status and nurse-patient relationship in healthcare settings.

H3: There is significant relationship between education level and nurse-patient relationship in healthcare settings.

The next phase of research is to gather documentation, analyze it, and generate conclusions once a hypothesis has been developed. We must verify the significance of our research is strengthened by testing of hypotheses.

Theoretical Framework

In the field of healthcare, Nurse-patient relationship must be strong enough. The good relationship between the patient and nurses has great significance in the medical policy arena as well. The patient satisfaction can the affected by the reputation of the nurses and also hamper the organization as well.

Conceptual Framework:

Keeping in view all the variables discussed by different researchers we have chosen Three variables, which are Age, Marital status and educational level and the dependent variable is nurse-patient relationship in healthcare settings.

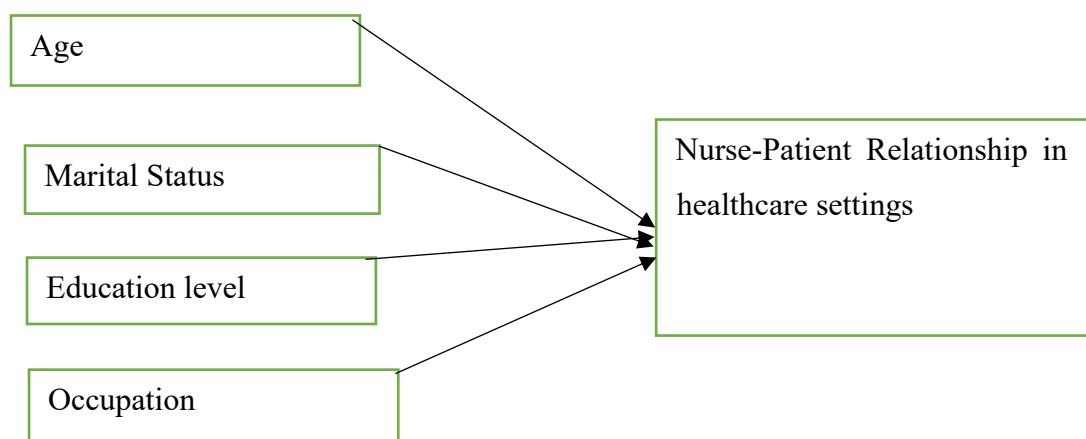*Figure 1.1: Conceptual Framework*

Literature Review

The nurse-patient relationship is a fundamental aspect of healthcare that significantly impacts patient outcomes, satisfaction, and overall quality of care. This literature review synthesizes

findings from multiple research studies to provide a comprehensive understanding of the nurse-patient relationship, its attributes, influencing factors, and implications for clinical practice.

The caring nature of nurse can generally be interpreted as an ability to be dedicated to others, watchful oversight, feelings of love or care (Wiechula, Conroy, Kitson, Marshall, & Whitaker, 2016). Caring is a way of dynamic approach, where nurses work to further improve its care to clients. The good behavior of nurses aims to provide physical care and attention to emotions while increasing the client's sense of security and safety, then behavioral caring also emphasizes the individual's self, meaning that in carrying out nursing practice, nurses always respect clients by accepting the client's strengths and weaknesses so they can provide appropriate health services to patient.

Nurse caring behavior requires an increase in nurses' knowledge about human's aspects of growth and development, responses to a constantly changing environment, limitations and strengths and basic human needs. The institute of medicine IOM has determined that care services are said to be of good quality if nurses provide services to patients in accordance with basic aspects of acceptance, attention, responsibility, communication, and cooperation. Quality of service is influenced by the presence or absence of criticism and complaints from patients, social institutions, or nongovernmental organization even from the government though. Quality can be realized if there has been and the end of the interaction between patient and nurses.

The nurse–patient relationship has traditionally been viewed as the essence of nursing practice. This paper disputes that the ideals of such a relationship occur effortlessly in nursing practice. Findings from a phenomenological study of individuals hospitalized with a depressive illness found that a therapeutic relationship did not come instinctively to the mental health nurses, and that there was a dichotomy between the close relationship expected by patients and the distant relationship provided by nurses (Ctievano, Caruso, & Friganović, 2024). It is unclear whether nurses' distancing behavior was as a result of the participant's depressive illness, a normal part of nursing practice, or whether other features such as nurses' workloads were an influencing factor. Further research is required to explore this.

The nurse–patient relationship traditionally has been thought central to professional practice For several decades, nurse theorists have explored the communication processes which mediate clinical practice and the variously described outcomes of these processes Yet while interpersonal skills and personal attributes have been considered integral to professional bonding, and while outcomes of the process are widely discussed, clinically based validation of theorized process components has not been definitively accomplished (Uçar, Çelik, Altıntaş, & Yücel, 2024). To this end, 67 critical incidents concerning experienced clinicians' perceptions of their closest professional relationships were analyzed. The perceived professional bond was demonstrated to be a cumulative process of attachment with three qualitatively different levels of involvement and two impasse states. The most intense levels of attachment were perceived to be the most beneficial by the nurses who described relationships characterized by mutuality and reciprocity. This level was not, however, achieved by all nurses

in the sample Implications of the perceived outcomes of the most intimate professional relationships were discussed.

According to Mirza Tiwi (2009), the quality of health care workers shows the performance (performance) of health services known as outputs which is the result of the actions of doctors and other professionals towards patients, in the sense of changes in health status and satisfaction both positive and otherwise Lake, E. T. (2002).

Method & Materials

Introduction

This chapter presents the methodology that is used in the study. It includes study design, sample selection and procedures methods of data collection. It also describes the research instrument used for data collection, the methods and procedure of data analysis and the ethical consideration employed in data collection.

Research Approach

Questionnaire survey research approach is used for this research. It is very effective and efficient approach when researchers have limited time and exactly know what is required and how to measure the variables. It is very useful approach to find out educational facts and findings and have relatively small sample size.

Research Design

The descriptive study design was used to fulfill the objective of the study research. Robson(Saunders, 2007) defines descriptive study as aimed to develop an accurate profile of organizations, country, or groups.

Setting of the Study.

The study was conducted in people who has\have experienced nursing care in hospitals or any other health care settings. It helps to know the relationship between nurse and patients in hospitals which at the end shows the satisfaction level of the patients.

Study Population

The study population of this research is the people in the age range from 16 to 50 who have experienced the nursing care in a hospital or any other healthcare institute for the easy survey of the research study.

Sample Size

The sample size consists of 112 patients.

Sampling Technique

Patients who have experienced the nursing care were focused and who fulfilled the inclusion criteria were collected as samples by the convenient sampling technique.

Data collection Tool

It is the instrument which was used by the researcher during the research period for the relevant data result. The questionnaire technique was used during the time of the research sample collection.

Plan of Analysis

The questionnaire was divided in 2 parts.

In the 1st part, demographic questionnaire was asked.

In the 2nd part, overall trust and relationship related questions was asked.

Results & Analysis

In this research, a new econometric model and different statistical tools were used to measure the nurse-patient relationship in the healthcare settings. Different statistical tools such as correlation of coefficient, frequency and mean were used to test hypothesis. The appropriate computer software (SPSS) was extensively used to measure the relationship between the variables under study.

For the descriptive analysis, a well- structured questionnaire was distributed to 112 respondents.

4.1 Demographic Analysis

Table 1: Demographic information (Age)

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	29	25.9	25.9	25.9
	20-25	64	57.1	57.1	83.0
	25-30	11	9.8	9.8	92.9
	30-35	8	7.1	7.1	100.0
	Total	112	100.0	100.0	

This data shows the distribution of 112 individuals across four age groups. The majority (57.1%) are between 20-25 years old. About 25.9% are aged 18-20, 9.8% are 25-30, and the remaining 7.1% are 30-35. Each percentage represents the proportion of the total sample, with the cumulative percent showing the running total as you move through the age groups.

Table 2: Demographic Information (Education level)

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Secondary	12	10.7	10.7	10.7
	higher secondary	30	26.8	26.8	37.5
	Bachelor	61	54.5	54.5	92.0
	Master	9	8.0	8.0	100.0
	Total	112	100.0	100.0	

The data shows the education levels of 112 people. Most of them, 54.5%, have a Bachelor's degree. About 26.8% finished Higher Secondary school, and 10.7% completed Secondary school. The smallest group, 8%, have a Master's degree. This means most people continued their education beyond high school.

Table 3: Demographic Information (Occupation)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	27	24.1	24.1	24.1
	Unemployed	9	8.0	8.0	32.1
	Student	76	67.9	67.9	100.0
	Total	112	100.0	100.0	

The table shows the employment status of 112 people. Out of these, 27 are employed (24.1%), 9 are unemployed (8%), and 76 are students (67.9%). In total, students make up the majority, followed by those employed, and then the unemployed.

Table 4: Demographic Information (Marital Status)

Marital status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	87	77.7	77.7	77.7
	Married	12	10.7	10.7	88.4
	Unmarried	13	11.6	11.6	100.0
	Total	112	100.0	100.0	

This table shows the marital status of 112 people. Most of them, 87 individuals or 77.7%, are single. There are 12 people, or 10.7%, who are married. Finally, 13 people, making up 11.6%, are unmarried. The percentages add up to 100% when you combine all categories, meaning the table covers all individuals in the sample.

Correlation Analysis

Correlation between age and nurse patient relationship in healthcare settings

The following table shows the correlation between age and nurse-patient relationship in healthcare settings.

Table 5: Correlation of age and nurse-patient relationship in healthcare settings

		Age	Mean total
Age	Pearson Correlation	1	.016
	Sig. (2-tailed)		.868
	N	112	112
Mean total	Pearson Correlation	.016	1
	Sig. (2-tailed)	.868	
	N	112	112

The table shows there's a very weak and practically non-existent relationship between age and the "Mean total" variable. The correlation coefficient is only 0.016, which is very close to zero, Indicating almost no connection. The significance value is 0.868, much higher than the usual cut-off of 0.05, so we can say with confidence that age doesn't really affect the "Mean total" in this case. Essentially, there's no significant link between how old someone is and their Mean total score. The result shows that there is no significant relationship (p< 0.05 i.e. .868) between age and nurse-patient relationship. The result rejects the alternative hypothesis.

Correlation between educational level and nurse-patient relationship in healthcare settings

The table shows the correlation between education level and nurse-patient relationship in healthcare settings.

Table 6: Correlation between education level and nurse-patient relationship in healthcare settings.

		Education level	Mean total
Education level	Pearson Correlation	1	-.012
	Sig. (2-tailed)		.902
	N	112	112
Mean total	Pearson Correlation	-.012	1
	Sig. (2-tailed)	.902	
	N	112	112

The result shows that there is no significant relationship (p> 0.05 i.e.0.902) between education level and nurse-patient relationship. The result rejects the alternative hypothesis. The correlation is -0.012, which is very close to zero and suggests a tiny, nearly insignificant negative relationship. With a significance value of 0.902, well above the usual cut-off of 0.05, it confirms that this weak link is not significant. In other words, education level doesn't noticeably affect the "Mean total" in this case.

Correlation between marital status and nurse-patient relationship in healthcare settings

The table shows the correlation between marital status and nurse-patient relationship in healthcare settings.

Table 7: Correlation between marital status and nurse-patient relationship in healthcare settings.

		Marital status	Mean total
Marital status	Pearson Correlation	1	-.049
	Sig. (2-tailed)		.604
	N	112	112
Mean total	Pearson Correlation	-.049	1
	Sig. (2-tailed)	.604	
	N	112	112

The result shows that there is no significant relationship (p> 0.05 i.e. .604) between marital status and nurse-patient relationship. The result rejects the alternative hypothesis. The correlation is -0.049, which is nearly zero, suggesting almost no relationship. With a significance value of 0.604, well above the common cut-off of 0.05, this tiny correlation is not statistically significant. In other words, marital status doesn't significantly influence the "Mean total" in this case.

Correlation between occupation and nurse-patient relationship in healthcare settings.

Table 8: Correlation between occupation and nurse-patient relationship in healthcare settings.

		Occupation	Mean total
Occupation	Pearson Correlation	1	-.083
	Sig. (2-tailed)		.384
	N	112	112
Mean total	Pearson Correlation	-.083	1
	Sig. (2-tailed)	.384	
	N	112	112

The result shows that there is no significant relationship (p>0.05 i.e. 0.384) between age and nurse-patient relationship. The result rejects the alternative hypothesis. This value is close to zero, suggesting almost no relationship. The significance value is 0.384, which is higher than the usual threshold of 0.05, meaning this weak correlation is not statistically significant. Essentially, occupation does not have a meaningful impact on the "Mean total" in this data.

Response Analysis

Table 9: Response Analysis

		Count	Layer N %
Do you feel affection and supported when you receive care from nurses?	Not at all	13	11.6%
	Little bit	32	28.6%
	Moderately	25	22.3%
	Quite a bit	22	19.6%
	Extremely	20	17.9%
	Total	112	100.0%
Do you think the time the nurse spends with you is enough?	Not at all	13	11.6%
	Little bit	38	33.9%
	Moderately	31	27.7%
	Quite a bit	19	17.0%
	Extremely	11	9.8%
	Total	112	100.0%
Do you feel that care requirements are met by nurses?	Not at all	9	8.0%
	Little bit	29	25.9%
	Moderately	32	28.6%
	Quite a bit	30	26.8%
	Extremely	12	10.7%
	Total	112	100.0%
Does the nurse clarify your doubts during the care?	Not at all	9	8.0%
	Little bit	21	18.8%
	Moderately	32	28.6%
	Quite a bit	29	25.9%
	Extremely	21	18.8%
	Total	112	100.0%
Do you have confidence in the nurse's clinical assessment of your health?	Not at all	7	6.3%
	Little bit	29	25.9%
	Moderately	31	27.7%
	Quite a bit	27	24.1%
	Extremely	18	16.1%
	Total	112	100.0%
Do you feel the treatment provided by the nurses brings positive outcome for you?	Not at all	6	5.4%
	Little bit	21	18.8%
	Moderately	29	25.9%
	Quite a bit	27	24.1%
	Extremely	29	25.9%
	Total	112	100.0%
Do you find nurse's gestures pleasant?	Not at all	10	8.9%
	Little bit	23	20.5%

	Moderately	33	29.5%
	Quite a bit	29	25.9%
	Extremely	17	15.2%
	Total	112	100.0%
Do you believe what the nurses tell you	Not at all	9	8.0%
	Little bit	17	15.2%
	Moderately	25	22.3%
	Quite a bit	32	28.6%
	Extremely	29	25.9%
	Total	112	100.0%
Does the nurse ask for your permission before starting a procedure?	Not at all	13	11.6%
	Little bit	16	14.3%
	Moderately	21	18.8%
	Quite a bit	26	23.2%
	Extremely	36	32.1%
	Total	112	100.0%
Do you feel you receive personalized care?	Not at all	14	12.5%
	Little bit	24	21.4%
	Moderately	34	30.4%
	Quite a bit	23	20.5%
	Extremely	17	15.2%
	Total	112	100.0%
Do you talk about matters other than illness with the nurse?	Not at all	43	38.4%
	Little bit	22	19.6%
	Moderately	15	13.4%
	Quite a bit	20	17.9%
	Extremely	12	10.7%
	Total	112	100.0%

The survey results show varied patient feelings about the nursing care they receive. Many feel only a little supported (29%), while some feel moderately (22%) or highly supported (18%). Regarding the time nurses spend with them, many think it's somewhat enough (34%), with fewer believing it is very sufficient (10%). When it comes to meeting care requirements, many feel their needs are somewhat met (26%), some feel they are well met (27%), and fewer feel they are completely met (11%). For clarifying doubts during care, many feel their doubts are moderately addressed (29%), some feel well addressed (26%), and fewer feel completely addressed (19%).

Confidence in nurses' clinical assessments is moderate for many (28%), high for some (24%), and complete for fewer patients (16%). Regarding the positive outcomes of treatments provided by nurses, many see moderate benefits (26%), some see high benefits (24%), and

fewer see complete benefits (26%). Many patients find nurses' gestures moderately pleasant (30%), some find them very pleasant (26%), and fewer find them extremely pleasant (15%).

Belief in nurses' information is moderate for many (22%), high for some (29%), and complete for fewer patients (26%). When it comes to asking for permission before procedures, many feel nurses often ask (23%), some feel they always ask (32%), and fewer feel they sometimes ask (19%). Personalized care is felt to be moderately provided by many (30%), very personalized by some (21%), and completely personalized by fewer patients (15%). Finally, most patients do not discuss non-illness matters with nurses (38%), some do a little (20%), and few do a lot (18%). Overall, patient satisfaction with nursing care varies, with many expressing moderate satisfaction across different aspects.

Conclusion and Recommendation

Conclusion

Our focus of the study was to investigate the Nurse-patient relationship in healthcare settings. The researchquestion was "Do you feel affection and supported when you receive care from nurses?" in the hospitals and other healthcare institutions. The study contains a lot of research variables which are done while collection of questionnaire data.

We chose trust for our study to investigate how the nurses deals with the patients,the way they behave toward the patient and whether they listen towards the patient's views, thoughts, opinion regarding their treatment. The study has been done on whether they give importance to their patient's treatment or not. As we had got different perspectives from differentage and other demographic status. As in correlation there is significant relationship between age and patient satisfaction regarding trust from above analysis.

Recommendation

As the study was done on patients' satisfaction regarding trust towards the nurses in hospital and relationship that develops between the nurse and the patients. Being a healthcare management student, this research result show that due to busy schedules it will be difficult to provide full attention to every patient and it will be difficult to provide qualityservice and sometimes it is hard to deal with patients and satisfy them due to the nurse-patient ratio in Nepal. Therefore, for the good Nurse-patient relationship, the proper coordination is required including the personalized care for the patients.

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