

# Improving Patient Safety Through Effective Nurse-Patient Communication

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## **Abstract**

### **Background**

There has been a considerable increase in risk to patient safety. 40 million people are harmed in healthcare due to safety issues. This creates high death rates and lowers the efficiency level of the healthcare organisation. However, studies have demonstrated that Nurse-patient communication can increase the level of patient safety

### **Methodology**

Mixed method research was performed where in primary qualitative data collection interview was performed and in the quantitative paradigm, the survey was performed. 3 nurses were involved in the interview and 20 patients were selected for the survey.

### **Findings**

From the data collected through the interview, it has been found that risk factors to patient safety are due to burnout in patients, lack of staffing and lack of technological understanding. From the quantitative analysis, the survey result indicated most of the respondents were female and aged between 51-70 which showed a statistic. The correlation values also showed a positive correlation between communication and patient safety while reducing medical errors.

### **Conclusion**

From the study, it can be concluded that communication between patients and nurses significantly impacts the safety of the patients. Enhancement of communication can improve the safety of the patient.

**Keywords:** Nursing ethics, patient advocacy, autonomy, confidentiality, healthcare ethics, resource constraints, interdisciplinary collaboration.

### **Conflicts of Interest:**

The authors declare no conflicts of interest.

## **Introduction**

Patient safety is a framework which organises activities which create culture and behaviours in the healthcare models which can limit the risks and dangers to the patients (1). It is understood that every process in providing the care of the patient includes inherent risks which pose a threat to the patient and reduce the health outcomes. It is understood that nurses play a vital role in ensuring that the patients are safe (2). Ineffective communication between patients and nurses can deter the understanding of the condition of the patient which can increase risks. There are other factors that can increase the risk to the patient's safety. A study has shown that psychiatric diseases can increase the risk of being a reported case of preventable harm (3). The study shows that around 40 million people are harmed in healthcare on an annual basis. However, 5 to 8 per cent of the hospitals have stated that these risks could have been prevented. It is understood that when nurses do not communicate with patients effectively, they fail to acknowledge holistic details about the patients. This creates a gap in unavailable information to the nurses and hence the safety of the patient is compromised. However, studies have highlighted that effective communication can improve the safety of the patients and further foster patient satisfaction (4). When nurses are engaged in transparent communication with the patient, they tend to receive information and insight about the risk factors of the patients. This can be further utilised in deriving strategies to improve the safety level of the patients. Considering this as a premise, the assignment will explore the improvement of patient safety through effective nurse-patient communication.

### **Methodology**

#### **Study Design**

In this research the methodological design emphasizes a mixed method research style where both qualitative and quantitative paradigm of data which may establish more rational sense and empiricism. According to (5), pragmatism philosophy can justify the mixed method research in the lens of 'dialectical pluralism' where reality is multiple and there can be multiple ways to manifest for the realist vision and conceptualisation of different range of insight and raw experience. On the other hand mixed method research design can be validated by a

deductive approach to cope with the complexities and theoretical assumptions, evident within the spectrum of the research topic.

### ***Participants and sampling***

In defining the context of data collection, sampling and selection of participants can be one inevitable context. The qualitative data collection involved 3 nurses ruptured in their field and have decent range of professional experience where for the quantitative data collection, involvement of 20 patients was fruitful to gather descriptive information about the relation of communication and patient safety. Random sampling can choose participants randomly denoting the image of a large population where purposive sampling can choose participants fostering some definite characteristics (6). The quantitative data collection involved random sampling where purposive sampling was performed for qualitative participants selection.

### ***Data collection***

In a qualitative manner, an **interview** was performed with three nurses where the below-developed questions were asked to get the information of relation between nurse-patient communication and patient safety.

- What are the various risk factors that deter patients' safety?
- What are the challenges you face in effective communication with the patients?
- What strategies do you apply in order to communicate effectively with the patients?

On the other hand, in a quantitative manner and finding descriptive and correlated insight, 20 patients were involved to conduct a **survey** creating a questionnaire following Likert Scale cohesion.

### ***Data analysis***

According to (7), *thematic analysis* can nurture subjective knowledge while constructing different themes from the gathered information and real-time experience. On the other hand, for quantitative analysis, a *descriptive statistical method* can explain different variables from the collected dataset which improves the internal and external validity of the study (8). In this research, thus, thematic analysis was performed for the interview information and descriptive statistical analysis was performed for the survey findings.

### ***Ethical consideration***

For the primary research, ethical consent and participation information sheets were provided to the research participants. The data was collected and stored anonymously protecting all the sensible information with more confidentiality and university directed research ethics.

## **Results**

### **Interview Thematic Analysis**

#### ***Theme 1: Risk factors to the safety of the patients***

From the interview, it was found that there are a range of risk factors that can interfere with the safety of the patients. In this consideration, the response of Nurse 1 was “*In my opinion, the lack of staffing is one of the major risk factors related to patient safety. I think when the staff are significantly low in numbers workload pressure is high which can make us vulnerable to mistakes which might threaten the safety of the patients*”. The response illustrates a lack of staffing can threaten the safety of the patient due to enhanced risk of error. A study has also demonstrated a relationship between low registered nurse staffing and mortality is reasonable (9). Besides, nurse 2 stated “*Besides, it has also been understood that in healthcare there is a huge shortage of staff which creates a hue of work pressure. This enhances the burnout level of the nurses affecting their psychology negatively. Further bad mental health can create a barrier to communication between nurses and patients. “This response illustrates mental burnout can affect the efficiency of the nurses further increasing the risk to the patients.*

#### ***Theme 2: Challenges faced by nurses in effective communication***

The interview question was directed towards challenges that are faced by nurses in effective communication with patients. Studies have demonstrated that language barrier is a major barrier in communication between nurses and patients (10). The response of Nurse 1 is “*I think patients in most cases lack knowledge regarding medical terms and conditions. This can make them fail to explain to the nurses the issues they have been facing*”. This indicates that patients may not be aware of medical terminology which affects their ability to communicate with the nurse or understand the information communicated to them by the nurses. Besides, Nurse 2 stated that anxiety in patients can also create a barrier between patients and nurses. The response of the nurse was “*Besides, I have witnessed that there are times when patients may face fear and anxiety which can make it uncomfortable for them to express themselves. This creates a barrier between the patients and the nurses in transparent communication which can also create a knowledge gap which can interfere with the safety of the patient*”. This indicates that patients may find it uncomfortable to approach nurses due to anxiety, and shyness which may deter effective communication. Besides the response of nurse 3 was “*In my opinion, there are times when nurses may not be able to interpret the body language of the patients with accuracy. Body language and behaviours can also create a considerable prospect of understanding their issues*”. Hence, the inability of the nurses to interpret the body language of the patients creates a challenge for nurses to communicate effectively.

**Theme 3: Strategies to address the barriers and challenges in effective communication between patients and nurses**

Besides it is also important to identify the strategies to be followed by the nurses in order to address the barriers identified. In this regard, the response of Nurse 1 was “A transparent communication method is used by us to ensure that the information conveyed by the patients is effectively received. In such cases, we use writer communication to record the patient's words and then use its analysis to make meaningful information and insights”. This shows that transparent communication ensures that information is accurately conveyed which limits misunderstandings and reduces the impact of language barriers. A study has shown that empathy drives clear communication (11). In a similar context, Nurse 2 responded “In our healthcare setting, nurses showcase a high level of empathy which further helps in gaining trust among the patients. This ensures that the patients can effectively approach the nurses by overcoming boundaries of anxiety and stress”. This shows that when nurses showcase empathy it creates a positive perception among the patients and they easily approach nurses to communicate and create effective and transparent communication grounds.

**Survey findings**

**Descriptive analysis**

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
1. What is your age?	20	3	1	4	2.05	.185	.826
What is your gender?	20	1	1	2	1.40	.112	.503
Valid N (listwise)	20						

**Figure 1: Descriptive statistics**

(Source: Self-developed)

From the above descriptive statistical table, two of the questions were examined where what is your age and what is your gender were then main instances among the 20 research participants. From the quantitative illustration, for age, the range minimum is 1 and maximum is 4 where the mean age score is 2.65 that denoted the age group of 51-70. The standard error was at 0.165 and standard deviation is 0.826 which indicated moderate variation in the responses. On the other hand, contemplating the descriptive statistics of the gender where the values were constructed between 1 and 2. 1 is the male and 2 is the female where the dataset comes up with a mean gender score of 1.40 which is closer to choose more male respondents. The statistical finding denoted standard error of 0.112 and standard deviation of 0.503 which has less variability in comparison with age. Contemplating the 20 valid responses, the descriptive statistics managed to acquire demographic distribution and endure for the justification of the dataset.

**Correlation**

Correlations									
		How far do you agree that communication is significant for getting ideal treatment?	How far do you agree that nurses and patients should leverage good terms of communication?	How far do you agree that enhanced communication can be effective to get nurses attention for any personalised need?	How far do you agree that nurse-patient communication can be beneficial for ensuring patient safety?	How far do you agree that nurse-patient communication can be beneficial for reducing medical errors?	How far do you agree that nurse-patient communication may foster teamwork for getting patient satisfaction?	How far do you agree that nurse-patient communication can be effective to build more trust between the patient and nurses for building more skills?	How far do you agree that nurse-patient communication can build resonance to patient wellbeing by early intervention of any detected complexities?
How far do you agree that communication is significant for getting ideal treatment?	Pearson Correlation	1	-.329	.213	-.022	-.240	-.054	.078	-.165
	Sig. (2-tailed)		.157	.367	.925	.308	.820	.743	.486
	Sum of Squares and Cross-products	18.800	-7.400	3.600	-.400	-5.400	-1.000	1.600	-3.600
	Covariance	.989	-.389	.189	-.021	-.284	-.053	.084	-.189
	N	20	20	20	20	20	20	20	20
How far do you agree that nurses and patients should leverage good terms of communication?	Pearson Correlation	-.329	1	-.484	-.143	-.058	.045	-.176	.299
	Sig. (2-tailed)	.157		.031	.548	.810	.849	.458	.200
	Sum of Squares and Cross-products	-7.400	26.950	-9.800	-3.050	-1.550	1.000	-4.300	7.800
	Covariance	-.389	1.418	-.516	-.161	-.082	.053	-.226	.411
	N	20	20	20	20	20	20	20	20
How far do you agree that enhanced communication can be effective to get nurses attention for any personalised need?	Pearson Correlation	.213	-.484	1	-.237	-.089	-.121	.065	-.470
	Sig. (2-tailed)	.367	.031		.315	.709	.612	.784	.036
	Sum of Squares and Cross-products	3.600	-9.800	15.200	-3.800	-1.800	-2.000	1.200	-9.200

	Covariance	.189	-.516	.800	-.200	-.095	-.105	.063	-.484
	N	20	20	20	20	20	20	20	20
How far do you agree that nurse-patient communication can be beneficial for ensuring patient safety?	Pearson Correlation	-.022	-.143	-.237	.1	-.306	.458*	-.119	-.010
	Sig. (2-tailed)	.925	.548	.315		.189	.042	.619	.968
	Sum of Squares and Cross-products	-.400	-3.050	-3.800	16.950	-6.550	8.000	-2.300	-.200
	Covariance	-.021	-.161	-.200	.892	-.345	.421	-.121	-.011
	N	20	20	20	20	20	20	20	20
How far do you agree that nurse-patient communication can be beneficial for reducing medical errors?	Pearson Correlation	-.240	-.058	-.089	-.306	.1	-.499*	.029	-.200
	Sig. (2-tailed)	.308	.810	.709	.189		.025	.905	.399
	Sum of Squares and Cross-products	-5.400	-1.550	-1.800	-6.550	26.950	-11.000	.700	-5.200
	Covariance	-.284	-.082	-.095	-.345	1.418	-.579	.037	-.274
	N	20	20	20	20	20	20	20	20
How far do you agree that nurse-patient communication may foster teamwork for getting patient satisfaction?	Pearson Correlation	-.054	.045	-.121	.458	-.499*	.1	-.400	.141
	Sig. (2-tailed)	.820	.849	.612	.042	.025		.080	.554
	Sum of Squares and Cross-products	-1.000	1.000	-2.000	8.000	-11.000	18.000	-8.000	3.000
	Covariance	-.053	.053	-.105	.421	-.579	.947	-.421	.158
	N	20	20	20	20	20	20	20	20
How far do you agree that nurse-patient communication can be effective to build more trust between the patient and nurses	Pearson Correlation	.078	-.176	.065	-.119	.029	-.400	.1	-.051
	Sig. (2-tailed)	.743	.458	.784	.619	.905	.080		.832
	Sum of Squares and Cross-products	1.600	-4.300	1.200	-2.300	.700	-8.000	22.200	-1.200
for building more skills?	Covariance	.084	-.226	.063	-.121	.037	-.421	1.168	-.063
	N	20	20	20	20	20	20	20	20
How far do you agree that nurse-patient communication can build resonance to patient wellbeing by early intervention of any detected complexities?	Pearson Correlation	-.165	.299	-.470*	-.010	-.200	.141	-.051	.1
	Sig. (2-tailed)	.486	.200	.036	.968	.399	.554	.832	
	Sum of Squares and Cross-products	-3.600	7.800	-9.200	-.200	-5.200	3.000	-1.200	25.200
	Covariance	-.189	.411	-.484	-.011	-.274	.158	-.063	1.328
	N	20	20	20	20	20	20	20	20

\* Correlation is significant at the 0.05 level (2-tailed).

Figure 2: Correlation findings

(Source: Self-developed)

Interpreting the variable correlation, identifying the same, the dependent variable is the patient safety and the dependent variable is the nurse-patient communication. Correlating these two variables, it can be said that, the variability of communication while getting ideal treatment can be correlated with more nurses attentive professionalism as the Correlation value was 0.213 which showed moderately positive correlation. Furthermore, the communication can be related with building resonance in patient wellbeing maintenance having the r value at 0.299. On the other hand, nurse-patient communication in the form of "building a positive relationship between nurses and patients," showed a weaker correlation to enforce a patient safety indicator. Patient safety contribution may not be correlated with communication as the r value was -0.105 which may foster influence on perception of safety is limited. On the other hand, patient communication with the nurses and embracing teamwork can ensure patient safety as the r value was .458. The positive and moderately positive correlation values are the only which show a diligent relationship between the variables whereas the negative values showed minimal correlation. These are the main findings, where correlation can be validated between the aforementioned dependent and independent variables.

## **Discussion**

### **Key Findings**

From the interview, it has been found that there are a wide range of causes that impact the safety of patients in the healthcare setting. The risk factors that have been found in this assignment are sufficient nurse numbers, high burnout and lack of technological understanding. It is understood that when staff are highly burned out their ability to focus on their job is reduced considerably. This creates more scope for mistakes in the effective treatment delivery to the patient. As a result, the safety of the patient is compromised which increases the risk to health. On the other hand, it is found that the aspect of Nurse-patient communication is highly affected by the competencies of the patient and the nurses. It has been understood that when nurses fail to interpret the body language of the patients, important signs and indications are ignored and missed which could further create risk in the safety of the patient. In a similar regard, it was found that patients can find issues in understanding their health and then expressing these health complications to the nurses. This is due to a lack of medical understanding and terms which affects communication. In terms of strategies to improve patient safety through effective nurse-patient communication, it was found that nurses are provided training to understand and interpret the behaviour of the patient. Besides, nurses also showcase a high level of empathy towards the patients which can encourage patients to approach nurses to communicate their issues and challenges. As a result, nurses are informed about the issues that can pose risks to safety and addressed during the early stages. Furthermore, from the descriptive statistical finding contemplating the survey result, most patients were satisfied and felt safe during more communication with the nurses while getting clinical support. Most of the participants were aged where nurses communication and trust gaining relationships can accomplish their needs in a personalised manner. Furthermore, from the correlation the most satisfying aspect of communication is the reduction of clinical error where patient safety can be enabled in the best version from any institution. From a certain aspect, the nurses believe more in communication and trust building activities for maintaining patient wellbeing where early intervention suggestion, skill building in the professional areas and building resonance to cope with any given complexities can be nurtured ethically. However, from a different mindset, the correlation also showed that relationship and personal touch in the communication paradigm may not be sufficient enough to build resonance for patient safety.

### **Comparison between data**

From the primary qualitative data, it was found that communication is significantly important in terms of maintaining the safety of the patient. Through communication important insights and knowledge regarding the safety of the patient can be gathered which can be used to identify the risk factors to the patient's safety. In a similar regard, the primary quantitative data has illustrated that most of the age of the research participants are between 51 and 70 where it can be denoted that patients having older age can have more need of clinical support where the nurses and their communication may establish greater satisfaction of the patients. On the other hand, most of the respondents are female where trust is a factor to cope with external challenges.

From the primary qualitative data collected, it has been found that communication between patients and nurses is significantly important in patient safety. It is understood that the communication gap between nurses and patients can act as a barrier to the transfer of important knowledge. This can further create a knowledge gap in patient safety. The primary quantitative findings have shown that, the correlation between communicative teamwork for patient wellbeing is justified. On the other hand, personalised relationship building may not be sufficient to manage patient safety which may be refurbished or the nurses can focus on other clinical support to reduce medical errors.

### **Conclusion**

From the findings, it can be stated that communication between patients and nurses is significantly important in improving patient safety. However, there are a range of factors that may impact the communication between nurses and patients which can cause anxiety of the patient, the inability of the nurses to interpret the behaviour of the patients and language issues due to lack of medical terms. However, when these issues are resolved, it

creates a transparent communication in which nurses receive more detailed and clear information which can be used by them to address any safety issues. Besides, patients are also able to effectively communicate the safety issues from their perspective which can be used by the nurses to develop a plan which improves the safety level of the patients during the treatment.

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