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Experiences of Nurses Regarding Communication with Mechanically Ventilated Patients in the Intensive Care Units

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ABSTRACT

Nurses' communication with mechanically ventilated patients is very imposrtant assuring respect and dignity of the patients and dealing the patient like a human being rather than a body. **Objective:** To explore the experiences and perspectives of nurses regarding communication with MVPs in the ICUs of Islamabad Pakistan. **Methods:** The qualitative phenomenological study was conducted on ten participants, selected through purposive sampling technique for individual in-depth interviews. **Results:** Six major themes of the study were recognition of communication experiences is essential for care, construction and interpretation of communication is situational, lack of speaking power led to feelings of powerless and frustration, nurses' responsibilities in the situation of critical care, impacts of verbal communication on the mechanically ventilated patient, and need for acceptance of knowledge and skills acquisition. **Conclusions:** The current study highlighted experiences of nurses regarding communication with mechanically ventilated patients in the ICUs. The study findings further suggested the areas for improvement of nurses' communication with MVPs.

INTRODUCTION

Nursing is a profession that is mandated to provide holistic care to the patients which can be delivered by developing a trusting and professional relationship with the patients [1]. Concerning this, communication is the basis for interpersonal relations between healthcare providers and the patient [2]. The communication pattern of critically ill patients is often disrupted; especially patients who are on mechanical ventilation. Communication is very important in every day of life, as it is a source of the exchange of ideas,

thoughts, feelings, and useful information at the same it provides emotional support [3]. The previous literature reported that 5.7 million people are admitted to ICUs annually out of which 20-30% require mechanical ventilation around the globe [4]. According to another study at United States revealed that approximately two-thirds of ICU beds were occupied all the time out of which approximately one-third of beds were occupied by patients receiving mechanical ventilation [5]. Similarly, a study

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conducted in Sweden has reported that out of 39,510 ICU admissions, 1,643 (4%) patients were on mechanical ventilation for 7-21 days while 307 patients were on prolonged mechanical ventilation >21 days [6]. Given this, different hospitals in Pakistan have a total of 220 ICUs with 2166 sanctioned beds accompanying 1473 ventilators at the same time, based on needs, govt of Pakistan is struggling to equip the ICUs with more ventilators. If all the sanctioned beds in ICUs were provided mechanical ventilators then there would be a bulk of patients admitted in those ICUs who are unable to communicate verbally due to mechanical ventilation [7]. Furthermore, physical and psychological health is also associated with satisfying and quality communication [8]. Regarding this, verbal communication is an interactive process, as unconscious patients cannot communicate verbally but still, there is a need to communicate with them verbally [9]. The communication pattern of nurses influences the satisfaction level of patients. A case study reported that while in a coma a female patient was exhausted by the sounds of people discussing her illness, doors opening and closing sounds, alarms of equipment, and people moving in and out [10]. But there was a sound informing her about her diagnosis, treatment plan, interventions, recovery expectations, etc. That was the only sound that relaxed her and helped her to cope with the situation. This case study highlights the importance of verbal communication with unconscious patients [11]. Unconscious patients receive stimulus from the outside world [12]. This stimulus acts as a trigger for them if positively perceived. Sometimes, it can result in sensory deprivation or sensory overload. This may result in psychosis [13]. It is a need of the unconscious patient to be provided with the useful and necessary information and moral support through verbal communication to promote sensory input to the patients. It may help reduce stress, can assist in preserving the self-identity and self-esteem of the patient, and reduce social isolation [14]. It is often observed that health care providers do communicate verbally with conscious patients regarding their illness, treatment plans, discharge teaching, and home carerelated aspects [15, 16]. However, when it comes to communicate with an unconscious/sedated/mechanically ventilated patient, healthcare personnel assume that patients are not able to understand their words; therefore, they do not bother to communicate verbally with patients [17, 18].

METHODS

The qualitative phenomenological framework was used for constructing meaning to the narrations of experiences of the study participants. The current study was conducted at the Pakistan Institute of Medical Sciences (PIMS) and

Capital Hospital Islamabad Public Sector Tertiary Care Hospitals at Islamabd. The target population for the current study was registered nurses working in tertiary care hospitals in Islamabad. The non-probability purposive sampling technique was used for participant's seletion. Ethical persmission was taken from the concerned departments. Informed consent was administered to the participants before data collection. Initially, the sample size was not fixed; finally, the sample size was limited to 10 participants due to the data saturation effect, and in-depth interviews were conducted to explore the experiences of nurses regarding communication with mechanically ventilated patients in the ICUs. The questions were briefly clarified to the participants before data collection in audio form. Individual face-to-face in-depth interview of all the participants was conducted that lasted for 20 minutes. The participants were allowed to speak up in either Urdu, English, or Punjabi language. The interviews were audiorecorded and handwritten transcripts were also done to prevent the loss of information. For thematic analysis Braun and clark's six step of data analysis were used.

RESULTS

The mean age of the study participants was 28 ± 4.94 years and the mean years of experience of the participants were 5.6 ± 05 years. There were 60% female participants in the study, followed by 40% male participants. More than 63% of participants' education was Bachelor's degree in nursing, 27% diploma in nursing, and only 10% Master's degree in nursing. In the current study, six participants were from the Pakistan Institute of Medical Sciences, four participants were from Capital Hospital Islamabad. Moreover, the mean time for the interview was 12 ± 5 minutes (Table 1).

Table 1: Participants demographic data

Variables	Category	Frequency (%)
Gender	Male	4(40)
	Female	6(60)
Marital Status	Un-married	7(70)
	Married	3(30)
Educational Qualification	Associate degree	3(27)
	Bachelor degree	6(63)
	Master degree	1(10)
Emloyment Status	Permanent	7(70)
	Contractual	3(30)
Current Place of working	CDA	4(40)
	PIMS	6(60)

Initially, 138 open codes were made from the interviewed data. During this phase, unnecessary codes were omitted and generated 92 axial codes. From the axial codes, 24 subthemes were extracted, which finally generated six major themes.

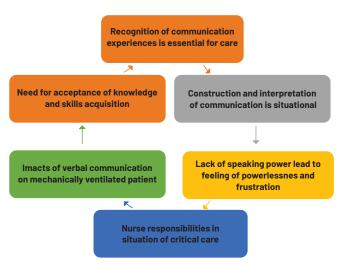


Figure 1: Basic Themes

The interviewed data generated first them i.e. recognition of communication experiences as essential for care. The theme was composed of further four sub-themes The major theme and its sub-themes are shown in the figure 2.

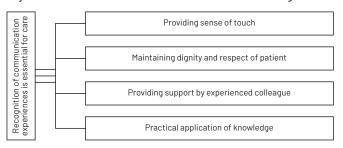


Figure 2: Recognition of communication experiences is essential for care

The nurses reported that they are providing a sense of touch to the mechanically ventilated patients which helped in maintaining their dignity and respect. In these matters of dealing, the experienced colleague supported the nurse and helped him/her in telling the correct method for communicating with mechanically ventilated patients. However, this helped him/her in using the theoretical knowledge into practice. This theme further comprises four sub-themes. As shown in figure 3.

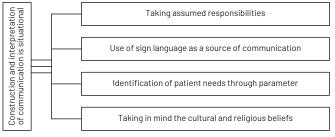


Figure 3: Construction and interpretation of communication is situational

Most of the ICUs patients were intubated and were not responding. Nurses in this case take assumed

responsibilities because the patients were not responding and doing hand gestures, signboards for communication. However, this is not applicable all the time in ICUs. Moreover, patients were treated with respect, maintained their cultural and religious beliefs while providing nursing care. The third theme and sub-themes are given below in figure 4.

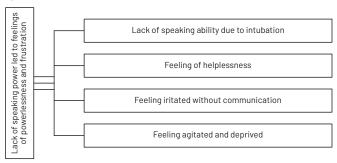


Figure 4: Lack of speaking power led to feelings of powerlessness and Frustration

Most of the ventilated patients were passed endotracheal tubes. Due to this, they were not able to communicate and feel helpless. Sometimes, the patients become irritated that they were not communicating. While sometimes the patients become agitated when the staff did not understand their non-verbal communication. The fourth theme and its sub-themes shown in figure 5.

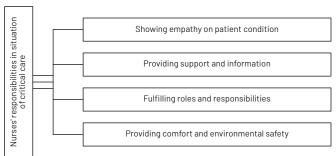


Figure 5: Nurses' responsibilities in situation of critical care Information is provided about the activities being performed in critical care areas some patients are not able to decide nor do they understand the situation. Nurses perform their roles and responsibilities wholeheartedly. Their duties are not only confined to care provision but also take care of environmental safety. The theme and its subthemes are given below in figure 6.

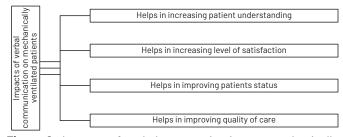


Figure 6: Impacts of verbal communication on mechanically

ventilated patients

The participants described that verbal communication has a lot of benefits for mechanically ventilated patients. It increases patients' understanding of the ongoing activities performed by nurses for those patients. Like when the nurse is giving nasogastric feeding, changing patient dress then telling him verbally the method of nasogastric feeding, etc. which will increase patients satisfaction. This would give confidence to the patients that their rights are maintained while providing care to them. The final theme and its sub-themes are given below in figure 7.

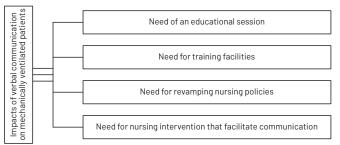


Figure 7: Impacts of verbal communication on mechanically ventilated patients

The participants recommended that there should be an educational session for nurses on verbal and non-verbal communication. They should be provided training facilities by an ICU expert nurse who knows how communication is done with mechanically ventilated patients. There is a need for revamping nursing policies and administration should maintain 1:1 nurse to patient ratio in critical care units. This would decrease the burden on nurses and they would be able to give maximum time to verbal communication as well as patient care.

DISCUSSION

The current study explored experiences and perspectives of nurses regarding communication with mechanically ventilated patients in the ICUs and generated six themes. In connection to this, the current study and the study conducted by Dithole et al., on communication skills intervention having six themes [19]. The current study and the study conducted by Dithole et al., were matched on one theme i.e. acceptance of knowledge and skills developed during workshops. Moreover, a study was conducted by Holm & Dreyer on nurse-patient communication within the context of non-sedated mechanical ventilated patients having one main theme titled as communication is a movement between the two opposite feelings of comprehension and frustration [20]. However, in the current study one major theme i.e. Construction and interpretation of communication are situational is similar to the study of Holm & Dreyer. Similarly, another study was conducted by Leung et al., on exploring the scope of communication content of mechanically ventilated

patients in ICU. Requests for services and patients' active provision of information were the main themes of it [21, 22]. However, the current study was not similar on any themes with the study conducted by Holm et al., A study by Dithole et al., on the communication experience of tracheostomy patients with nurses in the ICU [23, 24]. Facing continual misunderstanding, resignation, and anger during moments of difficulty and/or communication misunderstanding and feeling powerless and frustrated due to the impossibility to use voice to communicate were the theme of this study. The current study has nearly one theme same as the study conducted in 2021. The current study was similar on one theme with the study conducted by Dithole et al., on ICU nurses' communication experiences with patients having three themes i.e. learning through trial and error, facing unexpected communication difficulties and recognizing communication experience as essential for care [24]. Furthermore, the current study findings were not supported by a study conducted by Dithole et al., on the experiences of nurses serving as a communication guide [25]. The current study and the study conducted by Smith on nurses communication with mechanically ventilated patient has shown similarlities on major themes as well as on some sub-themes with the current study [26, 27]. One of the scoping review highlighted the importance of communication with mechanically ventilated patients and showed that most of the studies were investigated nurses experieces with mechanically ventilated patient [28]. In the current study, the importance of verbal communication has also given importance and its needs for the patients [29, 30].

CONCLUSIONS

The current study concluded that only few nurses even know about the importance of communication with mechanically ventilated patients and its impact upon patients' recovery and health outcoms particulary on psychological health. Poor speaking up capability of various nurses leads them to frustration and become a barrier for communication. Nurses' responsibilty in critical care is situational that strongly alter their experiences and perception of communication with mechanically ventilated patients. However, nurse showed need for accecptance of knowledge and skill acquisition.

Authors Contribution

Authors Contribution Conceptualization: N Methodology: SS, BK Formal analysis: TR, HA

Writing-review and editing: DM, NN

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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