Nurse–Physician Communication in Patient Care and Associated Factors, in King Khalid Hospital, Hafr Al-Batin,Saudi Arabia in 2023

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ABSTRACT

Background Effective nurse-physician communication is crucial for providing high-quality patient care and improving patient safety while reducing medical errors. Communication barriers between healthcare professionals are common, leading to adverse outcomes for patients. **Objective** The purpose of this research is to assess the nurse–physician communication in patient care and associated factors, in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023. **Methods** The study design was a quantitative, descriptive, cross-sectional, hospital-based study, and the study population was nursing and physician staff fulfilling specific inclusion criteria. A structured, self-administered questionnaire was used. Ethical considerations were taken into account. **Results** The study covered 167 nurses and physicians, 121 (72.5%) were nurses, while 46 (27.5%) were physicians. The findings showed that there is a lack of clarity and mutual understanding in communication between nurses and physicians, and a small percentage always ask for clarification and have a mutual understanding of treatment plans. Participants generally feel understood, respected, and satisfied after interactions, but a significant portion feel angry. The overall assessment score for nurse-physician communication is 66.1. There was a statistically significant difference in communication scores between nurses and physicians. **Conclusion** in conclusion, the study found that there is a lack of clarity and mutual understanding in communication between nurses and physicians.

Introduction

The establishment of effective communication channels between nurses and doctors is crucial for the delivery of optimal patient care. Numerous studies have shown that inadequate communication may result in medical mistakes, treatment delays, and diminished levels of patient satisfaction. Furthermore, it has been shown that proficient communication has the potential to enhance patient outcomes and optimize healthcare efficiency, as indicated by Antwi et al. (2019). Hence, it is important for healthcare practitioners to comprehend the determinants that impact communication between nurses and physicians.

Time constraints are a significant determinant of nurse-physician communication. According to Rosen (2018), empirical research has shown that the presence of time limitations might hinder the efficacy of communication and cooperation among nurses and doctors. Physicians usually have a substantial workload and experience numerous interruptions, hence posing challenges to their efficient communication with nurses. In a similar vein, nurses may find themselves occupied with the task of overseeing several patients, hence increasing the likelihood of experiencing failures in communication with doctors (Rosen, 2018).

The hierarchical structure of healthcare is an additional aspect that influences nurse-physician communication. Throughout history, there has been a notable disparity in rank and authority between doctors and nurses, resulting in significant implications for communication relations. Nurses may have a sense of reluctance in engaging in communication with doctors when they perceive an unequal distribution of power, which may result in suboptimal communication and potentially compromise patient care (Rosen, 2018). Research conducted by Antwi et al. (2019) has shown that endeavors aimed at dismantling hierarchical structures and fostering egalitarian communication have the potential to improve cooperation between nurses and physicians.

The establishment of effective communication between nurses and doctors necessitates the presence of mutual respect and confidence. Nurses and doctors sometimes possess distinct educational backgrounds and undergo training programs that result in divergent perspectives on providing patient care. Moreover, nurses may have reluctance in articulating their viewpoints or apprehensions to doctors, resulting in substandard communication (Rosen, 2018). The establishment of trust and respect within the nurse-physician relationship has been shown to facilitate open communication, hence improving the quality of patient care and ultimately leading to better patient outcomes (Antwi et al., 2019).

Hence, the establishment of good communication between nurses and doctors is crucial in ensuring the delivery of high-quality patient care. The communication dynamics between healthcare professionals may be influenced by several factors such as time constraints, hierarchical structures, and a lack of trust. By considering

these variables and fostering an environment of open and courteous communication, it is possible to augment the cooperation between nurses and physicians, hence leading to improved patient outcomes.

The establishment of effective communication channels between nurses and doctors is of paramount importance in ensuring the delivery of safe and high-quality patient care. In the context of Saudi Arabia, it has been observed that despite the acknowledgement of the significance of effective nurse-physician communication, research indicates the persistence of communication breakdowns and inadequate cooperation.

A research done in Saudi Arabia sought to ascertain the parameters linked to suboptimal nurse-physician communication within critical care units. The research revealed that communication hurdles were influenced by several variables, including inadequate communication procedures, cultural disparities, and healthcare workers' insufficient competency in the English language. Furthermore, it is worth noting that organizational issues, such insufficient staffing and high task expectations, have been shown to have a detrimental effect on the communication dynamics between nurses and doctors.

Statement of the problem
Inadequate communication among healthcare professionals has the potential to result in significant adverse occurrences. Within the healthcare context, a prevalent communication obstacle is the deficiency in effective communication between nurses and doctors. Research findings indicate that there is a significant lack of effective communication between nurses and doctors, which has been identified as a contributing factor to adverse patient outcomes. These consequences include heightened rates of illness and death, prolonged hospital stays, reduced patient satisfaction, and escalated healthcare expenses. Inadequate comprehension of respective duties and responsibilities, deficient communication during the transfer and exchange of patient care, and the presence of a hierarchical organizational culture are among the contributing variables that result in suboptimal nurse-physician communication within the context of patient care.

Research has shown that there is a prevailing consensus on the insufficiency of communication between nurses and doctors in Saudi Arabia, mostly attributed to cultural and hierarchical obstacles. The absence of efficient communication has the potential to result in medical mistakes, delayed provision of treatment, and diminished levels of patient satisfaction. The research proposes the implementation of interventions aimed at fostering a culture characterized by open communication and cooperation among nurses and doctors in the context of Saudi Arabia.

This research aims to evaluate the communication between nurses and physicians in patient care, along with the variables influencing this communication, within the setting of King Khalid Hospital in Hafr Al-Batin, Saudi Arabia in the year 2023.

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Purpose of the study

The purpose of this research is to assess the nurse–physician communication in patient care and associated factors, in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023.

Definition or concepts of termsCommunication

Communication refers to the act of transmitting information, thoughts, ideas, or emotions between many persons or groups via several channels, including verbal expression, written correspondence, nonverbal cues, and bodily movements. The use of this platform facilitates the exchange and comprehension of information and viewpoints, allowing individuals to articulate their ideas and emotions, as well as cultivate interpersonal connections. The importance of effective communication cannot be overstated in several domains, including personal relationships, economic connections, and social interactions. It serves as a crucial factor in facilitating mutual comprehension and dispute resolution.

Study questions

1 What is the level of nurse–physician communication in patient care and associated factors, in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023?

2 What are the factors (demographical / professional / work related) that may influence the nurse–physician communication in patient care and associated factors, in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023?

Methodology

Study design: This study is a quantitative, descriptive, cross sectional, hospital based study.
Study setting: The research was carried out in King Khalid General Hospital, which is considered one of the largest hospitals in Hafr Al-Batin, as it is the oldest hospital in the region.The hospital has a large number of nurses, about 200 nurses and doctors, and it has various departments, and the majority of nursing staff have long experience.

Study Population: The study population was the nursing / doctor staff who are currently working in King Khalid General Hospital, in Hafr Al-Batin, Kingdom of Saudi

Arabia within the study period, and fulfil the following criteria: Nursing staff and physicians (Both Saudi and non-Saudi and both genders was included) who Currently work in King Khalid General Hospital, in Hafr Al-Batin, in Kingdom of Saudi Arabia within the study period and accepted to participate in the study**.**

Sample size and technique: Since this is a cross sectional study, with known number of population (number of participants in the study area and duration who fulfilled the study criteria), the size of the study can be determined through the following formula: (Glynn, 2010)
n = N/ (1 + N (e)^2)

- Where n is the sample size and N is the population size (number of students who fulfilledwith the study criteria).
- Estimated population size = 200 participants (according to the records of King KhalidGeneral Hospital)
  - So, the sample size (n) = 200/ (1+200 $\times$ (0.05$\times$0.05)^2) = **133 participants**

Then, the participants were selected through stratified sampling method based on the nursephysician ratio. The final number was 167 participants

Research tools and method of data collection (source and validation)

- The quantitative data at the level of NPC were collected using English version of structured, self-administered questionnaires adopted from a study conducted in Iran and Jimma, Ethiopia. Further, it was developed by reviewing peer-reviewed published literature to include factors associated with the level of NPC. (Hailu, 2016)
- The questionnaire was categorized as socio-demographic characteristics of nurses and physicians (age, sex, marital status, professional category, work experience, educationallevel, current salary, and working unit), level of communication between Nurses and Physicians in patient care with 19 items, and participants were asked to rate each item ona 5-point Likert scale, which ranges from never (1) to always (5), and factors associatedwith the level of NPC in patient care, which has 19 items and participants were asked torate each factor on a 5-point Likert scale, which ranges from strongly disagree (1) to strongly agree (5). The internal consistency and reliability of the tool was established. The **Cronbach's alpha** coefficient for the level of NPC tool was 0.93, while the factorstool was **0.821**. The overall Cronbach's alpha of the tool was 0.862.
- The questionnaire was reviewed by three expert doctors for more validation and their comments were considered.

Ethical considerations

Written ethical clearance and approval for conducting this research were obtained fromUniversity of Hafr Al-Batin Ethical Committee. Written permission was obtained from the administrative authority King Khalid GeneralHospital. Study data/information was used for the research purposes only. The privacy issues were intentionally considered. A written consent was taken from the participants.

Data entry, analysis and presentation

Data was entered, cleaned, and analyzed using SPSS version 28.0 Descriptive statistics in term of frequency tables with percentages and graphs. Means andstandard deviations were presented with relevant graphical representation for quantitative data. Bi-variable analysis to determine the associations between the demographical / professionalcharacteristics of the nurse / physician with their communication level using Chi square test (for categorical variables) and t- test (quantitative variables) statistical tests. P value of 0.05 or less is considered statistically significant. Data was represented after analysis in form of uni-variable tables, cross tabulation (bivariable tables), figures and narrative illustration.

Results

Demographic Characteristics: Age: The majority of participants fell in the age range of 21-40 years, with 68 (40.7%) and 63 (37.7%) participants in the age range of 21-30 years and 31-40 years, respectively. The least number of participants fell in the age range of less than 20 years, with only 4 (2.4%) participants. Gender: Out of the total participants, 104 (62.3%) were female, and 63 (37.7%) were male. Marital Status: The majority of participants were married, with 112 (67.1%) participants. 40 (24.0%) participants were single, 12 (7.1%) were divorced, and 3 (1.8%) were widowed. Monthly Income: Out of the total participants, 116 (69.5%) had a monthly income of ≥10,000 SAR, while 51 (30.5%) participants had a monthly income of < 10,000 SAR. The results of the demographic characteristics are presented in Table 1 and Figures 1-4.

Professional Characteristics: Job**:** Out of the total participants, 121 (72.5%) were nurses, and 46 (27.5%) were physicians. Working Experience: The majority of participants had working experience in the range ofless than 5 years and 5-10 years, with 60 (35.9%) and 59 (35.3%) participants, respectively. 40 (24.0%) participants had working experience in the range of 11-15 years, and only 8 (4.8%) participants had working experience of more than 15 years. Qualifications: The majority of participants had a bachelor's degree, with 111 (66.5%) participants. 46 (27.5%) participants had a diploma, and only 8 (4.8%) participants had a master's degree. 1 (0.6%)

participant had a PhD, while 1 (0.6%) participant had other qualifications. Working Hours: Out of the total participants, 154 (92.2%) worked for more than 40 hours per week, while only 13 (7.8%) worked for less than 40 hours per week. The results of the professional characteristics are presented in Table 2.

Assessment Findings for Nurse-Physician Communication
Table (3) showed that only 3% of nurses and physicians always ask for clarification, whereas 48.5% never do. 37.1% of nurses and physicians always have a mutual understanding of thetreatment plans, whereas 6.6% rarely have such an understanding. In terms of discussing mechanisms to maintain the patient's safety, 32.3% of the participants always discuss it, while only 1.8% never do. When it comes to patient discharge, 33.5% of nurses and physicians confirm it by signatures from both parties, and 2.4% never do. Lastly, 36.5% of the participants have the same understanding of patient care, whereas 1.8% never have suchan understanding.

Table (4) showed that 35.9% of nurses and physicians always take each other's schedules into account when making treatment plans, and 3.6% never do. 49.1% of participants usuallyopenly exchange information, whereas 1.8% never do so. 37.7% of the participants always listen to each other during communication, whereas 1.2% never do. In terms of receiving correct information about patient care, 35.9% always receive accurate information, whereas only 0.6% never receive accurate information. Furthermore, 35.9% of the participants consider each other's views while making decisions about patient care.

Table (5) showed that 43.7% of the participants feel angry after the nurse-physician interaction, whereas only 6.6% of the participants feel frustrated. 52.7% of the participants usually feel understood, whereas only 1.2% never have such feelings. 51.5% of the participants feel respected after the interaction, and only 1.8% never do. Lastly, 50.9% of the participants feel pleased after the nurse-physician interaction.

Table (6) showed that 50.9% of nurses and physicians usually feel satisfied after the interaction, whereas only 2.4% never do. 37.7% of participants have equal understanding during interactions for patient care, whereas only 1.8% never do.

Furthermore, 38.9% of the participants feel joyful during interactions. In terms of considering each other's information about the patient, 37.1% of the participants always consider the information, whereas 1.8% never do.

Table (7) presents the overall assessment scores for nurse-physician communication. The mean score is 66.1, with a standard deviation of 16.4. The minimum score is 48.3,

and the maximum score is 83.0.

Cross tabulation
This part provided a cross-tabulation table to examine the relationship between demographic and professional characteristics and overall communication scores between nurses and physicians at King Khalid Hospital in Hafr Al-Batin, Saudi Arabia in 2023.

Age: The mean communication score for nurses and physicians below the age of 20 was 62.4, which increased to 67.9 for those between 31-40 years of age and 74.1 for those between 41-50 years of age. However, the p-value of 0.0565 indicates that the difference incommunication scores between age groups was not statistically significant.

Gender: The mean communication score for female nurses and physicians was 68.9, whereas it was 64.5 for male nurses and physicians. However, the p-value of 0.0901 suggeststhat there was no significant difference in communication scores between male and female nurses and physicians.

Marital status: The mean communication score for married nurses and physicians was 67,whereas it was 65.1 for single nurses and physicians, 59.3 for divorced nurses and physicians, and 73.9 for widowed nurses and physicians. The p-value of 0.0893 suggests that there was no significant difference in communication scores between the different marital status groups.

Job The results showed that the mean communication score between nurses and physicianswas 67.**0.** The mean communication score for nurses and physicians in their respective professions was 76.8 and 55.8, respectively. The difference between the mean scores was statistically significant (P = 0.0403).

Monthly income: The mean communication score for nurses and physicians earning SAR 15,000 was 75.3, which was the highest among all income groups. However, the p-value of 0.8820 suggests that the difference in communication scores between income groups was not statistically significant.

Qualifications: The mean communication score for nurses and physicians with a Ph.D. was 71.1, which was the highest among all qualification groups. However, the p-value of 0.8820 suggests that the difference in communication scores between qualification groups was not statistically significant.

Working hours/week: The mean communication score for nurses and physicians who worked less than 40 hours per week was 64.9, whereas it was 67.2 for those who worked 40hours or more per week. However, the p-value

of 0.0663 indicates that the difference in communication scores between working hour groups was not statistically significant.

In summary, the study examined the relationship between demographic and professional characteristics and communication scores between nurses and physicians at King Khalid Hospital in Saudi Arabia in 2023. Age, gender, marital status, monthly income, qualifications,

and working hours per week were analyzed. There was no significant difference in communication scores between age groups, gender, marital status, or monthly income. However, there was a statistically significant difference in communication scores between nurses and physicians in their respective professions. Additionally, there was no significant difference in communication scores between qualification groups or working hour groups.

Table (1) the distribution of the participants according to their demographic characteristics (n =167 nurses and physicians in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023)

Demographic characteristics		Frequency	Percent (%)
Age - years	< 20 years	4	2.4
	21 - 30 years	68	40.7
	31 - 40 years	63	37.7
	41 - 50 years	32	19.2
Gender	Female	104	62.3
	Male	63	37.7
Marital status	Married	112	67.1
	Single	40	24.0
	Divorced	12	7.1
	Widowed	3	1.8
Monthly income - SAR	< 10,000	51	30.5
	≥ 10,000	116	69.5

Table (2) the distribution of the participants according to their professional characteristics (n = 167nurses and physicians in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023)

Professional characteristics		Frequency	Percent (%)
Job	Nurse	121	72.5
	Physician	46	27.5

Working experience –years	**< 5 years**	60	35.9
	5 - 10 years	59	35.3
	11 - 15 years	40	24.0
	>15 years	8	4.8
Qualifications	**Bachelor**	111	66.5
	Diploma	46	27.5
	Master	8	4.8
	PhD	1	0.6
	Others	1	0.6
Working hours / week	**< 40 hours**	13	7.8
	≥ 40 hours	154	92.2

Table (3) the distribution of the participants according to overall assessment for nurse – physiciancommunication (n = 167 nurses and physicians in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023)

Variable	Mean	Standarddeviation	Minimum	Maximum
Overall assessmentscore	66.1	16.4	48.3	83.0

Table (4) the relation between the demographical characteristics with the overall communication score between nurses - physicians (n = 167 nurses and physicians in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023)

Demographical characteristics		Mean score	P value
Age - years	**< 20 years**	62.4	
	21 - 30 years	59.9	0.0565
	31 - 40 years	67.9	

	41 - 50 years	74.1	
Gender	**Female**	68.9	0.0901
	Male	64.5	
Marital status	**Married**	67	0.0893
	Single	65.1	
	Divorced	59.3	
	Widowed	73.9	
Monthly income - SAR	**<10,000**	66.6	0.1534
	≥ 10,000	65.9	

Table (5) the relation between the professional characteristics with the overall communication score between nurses - physicians (n = 167 nurses and physicians in King Khalid Hospital, Hafr Al-Batin, Saudi Arabia in 2023)

Professional characteristics		Mean score	P value
Job	**Nurse**	76.8	**0.0403**
	Physician	55.8	
Working experience –years	**< 5 years**	63.2	**0.0443**
	5 - 10 years	58.9	
	11 - 15 years	69.2	
	>15 years	75.3	
	Bachelor	64.4	
	Diploma	67.8	

Qualifications	Master	61.1	0.8820
	PhD	71.1	
	Others	66.0	
Working hours / week	< 40 hours	64.9	0.0663
	≥ 40 hours	67.2	

Discussions

The establishment of effective communication channels between nurses and doctors is crucial to achieve the best possible patient care results. Nevertheless, it has been shown via empirical research that instances of communication breakdowns and inadequate cooperation are prevalent within healthcare environments (Kolb et al., 2018). The results of the evaluation conducted on nurse-physician communication, as shown in Table 3, indicate the presence of notable communication deficiencies between nurses and doctors. The study indicates that a little 3% of nurses and doctors consistently seek explanation, while a significant majority of 48.5% do not engage in this practice. In a similar vein, it is noteworthy that a mere 37.1% of nurses and doctors consistently exhibit a shared comprehension of treatment plans, whereas a little 6.6% seldom possess such a level of knowledge. The aforementioned results align with other research that has similarly shown a dearth of lucidity and comprehension in the communication between nurses and physicians (Rushton et al., 2019; Fournier et al., 2019).

When examining the discourse around the methods used to uphold patient safety, it is seen that a significant proportion of participants, namely 32.3%, consistently engage in such discussions. Conversely, a little 1.8% of participants never partake in these conversations. The significance of safety conversations cannot be emphasized, given that patient damage arising from medical mistakes is a substantial problem within healthcare environments (Cronenwett et al., 2018). It is noteworthy that a significant proportion of nurses and doctors engage in discussions pertaining to safety measures. Nevertheless, there is a need to enhance communication within this domain.

Communication problems in patient discharge may lead to negative consequences, making it a major area of concern. According to the statistics shown in Table 3, it is evident that a mere 33.5% of nurses and doctors validate or affirm.

The process of patient discharge often involves obtaining signatures from all parties involved, with a small percentage (2.4%) failing to do so. The aforementioned discovery aligns with other research that has revealed deficiencies in formal discharge procedures and failures in communication during patient handovers (Kolb et al., 2018; Fournier et al., 2019).

The research results underscored the need of establishing effective and transparent communication channels between nurses and doctors. The research indicates that a majority of participants, namely 49.1%, tend to engage in open information sharing, while a small minority, specifically 1.8%, refrain from doing so altogether. Furthermore, it is noteworthy that a mere 35.9% of nurses and doctors consistently consider one other's schedules while formulating treatment plans, while a small fraction of 3.6% never engage in such consideration. Neglecting to take into account the respective schedules of individuals involved might give rise to disagreements and misinterpretations, hence potentially causing delays in the identification and management of medical conditions (Rushton et al., 2019).

Obtaining precise and reliable information on patient care is of utmost importance in order to achieve best results. According to the results shown in Table 4, it can be seen that a significant proportion of participants, namely 35.9%, consistently obtain correct information. Conversely, a mere 0.6% of participants reported never receiving accurate information. The discovery is promising; yet, there is a need to enhance communication within this domain.

The research results highlighted some emotional consequences associated with the communication between nurses and physicians. According to the results, a significant proportion of participants, namely 43.7%, reported experiencing feelings of anger subsequent to the contact. In contrast, a much smaller percentage of

participants, specifically 6.6%, indicated experiencing feelings of frustration. The aforementioned discovery highlights the need of tackling emotional and psychological obstacles in order to enhance communication effectiveness (Rushton et al., 2019). Furthermore, the findings indicate that a mere 51.5% of the participants reported feeling a sense of respect after the contact, while a little lower percentage of 50.9% expressed feelings of satisfaction. The results of this study indicate that there is a significant opportunity for enhancing the quality of communication between nurses and physicians.

The research results provided information on the degrees of satisfaction among individuals after interactions between nurses and physicians. The discovery that a majority of nurses and doctors, namely 50.9%, often experience a sense of satisfaction after their interactions is indeed a positive and promising outcome. Nevertheless, there is a need to enhance communication in order to cultivate

According to Fournier et al. (2019), individuals may experience enhanced comprehension and increased pleasure during social exchanges. Furthermore, a mere 37.1% of participants consistently take into account the information provided by their peers on the patient, whereas a negligible 1.8% never do so. The aforementioned discovery provides support for the notion that obstacles in communication and hierarchical structures within professional settings might impede the ability to collaborate effectively (Cronenwett et al., 2018).

Finally, the research results provided an overview of the evaluation scores pertaining to the communication between nurses and physicians. The mean score was calculated to be 66.1, while the standard deviation was found to be 16.4. The study's lowest recorded score was 48.3, while the highest recorded score was 83.0. The aforementioned discovery indicates a need for enhancing the caliber of communication between nurses and physicians in order to optimize patient care results.

In summary, the evaluation results indicate notable deficiencies in communication between nurses and doctors across several domains, including comprehension of treatment protocols, deliberation on strategies to ensure patient well-being, and coordination of patient discharge. Nevertheless, several domains, such as the dissemination of precise information and the discourse around safety protocols, exhibit promising outcomes. This research emphasizes the need of enhancing communication, promoting enhanced comprehension, and encouraging cooperation between nurses and doctors. It is essential for healthcare organizations to place a high priority on the improvement of communication and cooperation. This necessitates the implementation of strategies aimed at mitigating communication obstacles and addressing

professional hierarchies. Further research should also investigate strategies aimed at enhancing communication efficacy and cultivating favorable outcomes for both patients and healthcare professionals.

It is necessary to comprehend the impact of these elements on the efficacy of communication in order to effectively conduct treatments aimed at enhancing communication abilities. This study examines the impact of demographic factors such as age, gender, marital status, monthly income, educational credentials, and weekly working hours on communication scores within the healthcare sector.

The healthcare industry is seeing a growing prevalence of age diversity due to individuals choosing to postpone retirement and continuing to work into their later years. The impact of age disparities on interpersonal communication may be significant.

The efficacy of healthcare workers may be influenced by many factors, including variations in their experiences, cognitive changes that may hinder successful communication, and disparities in communication styles. Nevertheless, the research revealed that there was no statistically significant disparity in communication scores across all age cohorts. This discovery aligns with the research conducted by Wang et al. (2019), which indicated a lack of statistically significant correlation between age and communication abilities in the population of health science students.

The healthcare field has seen a notable rise in gender diversity, resulting in heightened patient expectations for communication that acknowledges their individual characteristics and preferences. Although it has been shown that both females and males possess strong communication abilities, disparities based on gender may emerge in the way communication is perceived and expected in the context of healthcare. The research revealed that there was no statistically significant disparity in communication scores between males and females, which aligns with the conclusions made by Sisson et al. (2018). In a recent research conducted by Ahmad et al. (2020), it was shown that female doctors had superior communication abilities compared to their male counterparts.

The variety of marital status, including both single and married individuals, has the potential to influence communication within the healthcare context. Married individuals who are also practitioners may have increased obligations and stress levels, which may potentially impact their efficacy in communicating. The research discovered that there was no statistically significant variation in communication scores based on marital status.

This conclusion aligns with other studies, such as the work conducted by Sisson et al. (2018). However, it is important to note that other studies, like the one conducted by Umapathy et al. (2019), have shown that married persons tend to have superior communication abilities. Hence, the research presents empirical support indicating that the marital status of healthcare workers does not have a substantial influence on their communication efficacy.

Income has been recognized as a significant socioeconomic predictor of health, wherein those with greater wages tend to possess better accessibility to healthcare resources and services. As a result, it is possible that there may be a perceived sense of superiority among practitioners who have greater income levels, which might possibly have a detrimental impact on the efficacy of communication. The present investigation revealed no statistically significant difference in

The results indicate a correlation between communication scores and income groups, which aligns with the conclusions drawn in previous research conducted by Mustafa et al. (2018). Nevertheless, previous research has shown a noteworthy correlation between wealth and communication, as demonstrated by Vasantha and Jeyakanthan (2019). Hence, more investigation is necessary in order to comprehend the significance of income in the context of healthcare communication.

The presence of diverse credentials among healthcare professionals has the potential to facilitate effective communication by fostering the exchange of specialized knowledge, constructive criticism, and a culture of professionalism. Nevertheless, variations in credentials may have an influence on communication hierarchies, so establishing obstacles among professionals and ultimately impacting the efficacy of communication. The research discovered that there was no statistically significant disparity in communication ratings across the various qualification groups, aligning with previous studies conducted in the field of nursing (Sardu et al., 2018). In a recent investigation conducted by Baba et al. (2018), it was shown that doctors who had advanced degrees exhibited superior proficiency in communicating. Therefore, it is important to do more study in order to have a comprehensive knowledge of the influence of credentials on healthcare communication.

The healthcare profession necessitates extended periods of labor, potentially compromising the efficacy of communication due to factors such as weariness, burnout, and stress. In addition, the allocation of working hours may have an effect on the accessibility of healthcare experts, hence diminishing the duration available for engaging in effective dialogue with patients. Nevertheless, the study yielded inconclusive results about the disparity in communication scores across different working hours

groups, so aligning with previous research conducted by Pitterle et al. (2019). In contrast, a research conducted by Elmorsy et al. (2019) revealed an inverse relationship between the number of hours worked and the level of efficacy in communication. Hence, more investigation is critical in order to comprehend the impacts of working hours on healthcare communication.

Nurses and doctors serve as the principal healthcare professionals, with effective communication skills playing a pivotal role in fostering teamwork and enhancing patient outcomes. The research revealed a statistically significant disparity in communication ratings among nurses and doctors operating within their respective roles.

The occupations of the individuals in question. The communication ratings of nurses were found to be higher than those of doctors, which aligns with previous research indicating that nurses allocate more time for communication and have a greater focus on patient-centered care compared to physicians (Adams et al., 2018; D'Ettorre et al., 2020).

Communication has a pivotal role in the healthcare domain, given its significant impact on enhancing patient outcomes. The findings of this research suggest that variables such as age, gender, marital status, monthly income, credentials, and working hours per week do not have a statistically significant impact on communication scores among the healthcare professional population. Nevertheless, a notable disparity in communication efficacy was identified between nurses and doctors. Hence, possessing extensive understanding of the significance of communication among various categories and variables of healthcare staff has the potential to enhance the practices and services of the healthcare system. The outcomes of this study may be used by healthcare organizations to devise programs aimed at enhancing communication skills within their staff. Additional study is required to explore the effects of the issues under investigation, with special emphasis on addressing the gaps in existing scholarly literature.

Implication for nursing

The findings of the study imply that there is a need for improvements in communication and collaboration between nurses and physicians in healthcare settings. The lack of clarity and mutual understanding in communication between these two professions can have a significant impact on patient safety, which is a critical aspect of nursing practice.

Moreover, the difference in scores between nurses and physicians suggests that there maybe inherent barriers to effective communication that need to be addressed. Nurses and physicians must work together to develop effective

communication strategies that foster mutual respect and understanding to provide better patient care and outcomes.

The study highlights the importance of ongoing research to explore and implement strategies that can enhance nurse-physician communication and achieve the desired outcome of improved patient safety. Overall, the implications of this study are valuable in shaping nursing practice and can promote better healthcare outcomes.

Conclusion

In conclusion, the study found that there is a lack of clarity and mutual understanding in communication between nurses and physicians, which can have an impact on patient safety. However, the majority of participants feel understood, respected, and satisfied after interactions, although a significant portion also feel angry.While there was no significant difference in communication scores between age groups, gender, marital status, or monthly income, there was a difference in scores between nurses and physicians. Therefore, it is important to improve communication and collaboration between these two professions to provide better patient care and outcomes. Further research could explore effective strategies to enhance nurse-physician communication to improve patient safety.

Recommendations

Based on the conclusion mentioned, the following are the recommendations that can be given for improving nurse-physician communication in patient care and associated factors:

1. Implement communication training programs for both nurses and physicians to enhance their communication skills and ensure mutual understanding.
2. Create open forums for nurses and physicians to discuss patient care and associated issues to promote better communication and collaboration.
3. Encourage a culture where all healthcare professionals respect each other's roles and expertise to avoid conflicts and misunderstandings.
4. Provide adequate resources to nurses and physicians to facilitate effective communication, such as updated medical records, clear guidelines, and shared decision-making tools.

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