

Research Article

Public Perception toward Nursing Profession in Selective Arabic Communities

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Received: 20 July 2023
Accepted: 21 October 2023
Published: 28 June 2024

Production and Hosting by KnE Publishing

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Editor-in-Chief: Prof. Nazik Elmalaika Obaid Seid Ahmed Husain, MD, M.Sc, MHPE, PhD.

Abstract

Background: The development of the nursing profession depends significantly on how communities perceive it. This study aims to identify the views and attitudes of Arabic communities, specifically those in Sudan, Yemen, and Egypt, toward the nursing profession.

Methods: A descriptive comparative study was used to identify the perception of Arabic communities (Sudan, Yemen, and Egypt) toward the nursing profession. The study was conducted in three Arabic countries (Sudan, Yemen, and Egypt) using an online approach by sending the link of questions to the targeted population using emails, WhatsApp, and social media. There were 529 participants from the three Arabic countries. The study was analyzed by SPSS software using descriptive and inferential statistics.

Results: A majority (75.6%) of the participants were aged <40 years, with most (82.9%) being between 21 and 30 years of age. There was a generally positive perception toward the nursing profession among these communities: 97.6% of Sudanese, 94.9% of Yemenis, and 96.1% Egyptian. There was a borderline statistical significance between the Sudanese and Egyptians' age and their perception toward their profession. Gender is the only factor influencing the perception in Sudan and Egypt, and while women have a higher positive perception in Egypt, men have a higher positive perception in Sudan.

Conclusion: Overall, the perception of Sudanese, Yemeni, and Egyptian communities toward the nursing profession is acceptable. The only influencing factor on the level of perception was Egyptian females who have high positive perception toward the nursing profession and Sudanese males who have high positive perception toward nursing profession We recommend further research to assess the perception toward nursing from different sociocultural backgrounds and on a larger sample size.

Keywords: perception, community, nursing, Sudan, Yemen, Egypt

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1. Introduction

Arabic communities are composed of Muslims who speak Arabic as their first language. They have a variety of family and social structures, religious and legal conventions, and highly variable economic resources [1]. The Arab world is officially composed of 21 states [2].

Society has traditionally played a significant role in developing the professions [3]. Society, through its laws, environmental conditions and political systems, determines those who must be educated and what the required skills are [4]. The role of society in the development of the professions should be explicitly identified as a collective process designed to improve the health and well-being of people [5]. Each profession is created by a social mechanism and is maintained by society. Some of the most important mechanisms are professional responsibility, ethical codes and traditions, values, as well as the norms and ethics of a society [6].

Nurses have assumed responsibility for providing healthcare to patients and families both historically and currently; however, they were not recognized as an organized occupation until the mid-nineteenth century when societal mores determined who practiced nursing [7]. Prior to the eighteenth century, the image of nursing was that of "an inferior, undesirable occupation" [8]. Nursing develops, grows, and changes with the great social and technological changes of the times. Image and shortage are issues in most, if not all, of the changes [9].

Image is one of the most important factors in the development of the nursing profession [10]. Most Arabic countries felt that the image of nursing has improved lately but still lacked appeal and prestige. Some countries such as Bahrain, Jordan, Sudan, and the Emirates [11] were satisfied with the image of nursing according to Shukri (2015) [12]. There has been a definite increase in the number of schools, hospitals, models for nursing practice, and the development of diverse patterns for nursing education. These changes reflect the growing need for nurses. Therapy has changed the image of nursing in the Arabic community. Thus, the nursing profession is developing rapidly in the Arab world although it still has a long way to go [13].

In most countries, nurses are the largest group of medical professionals. They provide the highest rates of patient care—both preventive and curative [14]. Despite being the largest group of service providers, the nursing profession has suffered from a severe shortage of qualified nurses, thus affecting healthcare delivery [15, 16]. Many countries are struggling to provide a minimum level of nursing staff [17].

This prediction of increased need and shortage is due to a number of factors including a registered nurse (RN) work force that is aging. There are also shortfalls in the number of students graduating, a decrease in the number of qualified nurse educators, and a multifaceted change in nurses' work environments. The Arab state and its societies are not isolated from this shortage and the global need for nurses [18, 19]. This has increased in severity with the emergence of the COVID-19 pandemic and the exposure of the healthcare sector and its shortcomings. In turn, this has prompted governments to direct their policies and capabilities to push and encourage healthcare professions, especially nursing, which has resulted in a change in societies' view of this profession from what it was previously [20, 21]. Hence, the main objective of this study is to highlight and explore public perspective views of the nursing profession in Arabic communities.

2. Methods

2.1. Study design

This descriptive and comparative study was conducted among Arabic communities living in Sudan, Yemen, and Egypt. The aim was to collect information to compare the similarities and differences between these communities toward nursing profession. The findings may provide information about the cultural and social similarities and differences among these countries.

2.2. Study setting

Data were collected online from three Arabic countries (Sudan, Yemen, and Egypt) by sending a link for questions to the targeted population using email, WhatsApp, and social media platforms. This approach allowed for convenient and sufficient data from participants without in-person visits.

2.3. Study period

The current study was conducted in Sudan, Yemen, and Egypt in the period from April 2022 to August 2022.

2.4. Characterisicics of participants

Subjects from Sudan, Yemen, and Egypt were invited to participate in the study.

2.4.1. Inclusion criteria

All citizens from the selected countries who agreed to participate in the study were included.

2.4.2. Exclusion criteria

All nurses and those under 17 years of age were excluded from this study.

2.5. Sampling technique

Participants from Sudan, Yemen, and Egypt were randomly selected based on convenience.

2.6. Sample size

The selection of participants from the countries was based on the convenience of response, those who responded to the online link were included in the study. Accordingly, the sample size was calculated as follow:

Slovene's formula:
$$n = \frac{N}{(1+Ne^2)}$$

 $n = \frac{150000000}{(1+150000000*0.05^2)} = 500$ individuals, where:

n = desired sample size,

N =estimated total population (150,000,000), and

e = margin error (0.05).

5% were added for ant missing or withdraw. There were 529 total participants from Sudan, Yemen, and Egypt.

2.7. Data collection technique and tools

The questionnaire consisted of two parts: (1) demographic variables such as age, gender, education, marital status, and preferences toward nursing care and (2) community perceptions toward the nursing profession adopted from a previous Saudi study by Saied et al. (2016) [22], annex 1 for questionnaire.

The assessment of community perception was measured via the adopted questionnaire composed of 16 questions on a Likert scale of 1–5: 1 for strongly disagree; 2 for disagree; 3 for neutral; 4 for agree; and 5 for strongly agree (the questions with negative indicators were reversed). The calculated score for each response was calculated to be

between 16 and 80. The negative perception was considered for those having <60% of the calculated score and positive perception for those having 60% or more of calculated score.

2.8. Testing instrument

In this study, the validity and reliability of a questionnaire as a testing instrument were evaluated. Validity – which measures the instrument's ability to accurately gauge its intended attribute - and reliability - which assesses its consistency and precision - were pivotal considerations [23, 24]. To assess the instrument, a pretest involving 50 participants from Jordan, recruited through social media, was conducted, with participants being fully informed about the study's purpose and assured of data confidentiality. The pretest results indicated that the questionnaire demonstrated satisfactory internal consistency, surpassing the acceptable Cronbach's α score of 0.7, signifying its reliability in consistently yielding accurate results. Additionally, the pretest confirmed the questionnaire's validity, demonstrating its effectiveness in measuring the intended attribute. This pretest served as a crucial step in refining the questionnaire before its broader application, enhancing the overall accuracy and consistency of the study's findings.

2.9. Statistical analysis

In this study, the SPSS version 26 was used for analysis. The demographics of the participants from the three countries were summarized using frequency and percentage. The average and variability of the participants' perception of the communities were calculated using mean and standard deviation. The cross-tabulation was used to identify the relationship between demographic variables and perception levels. A *P*-value < 0.05 was considered statistically significant.

3. Results⁷

Table 1 shows the demographic characteristics of the communities who participated in this study from Sudan, Yemen, and Egypt. Their age ranged from 17 to <50 years. More than half of them were married (58.9% in Sudan, 65.2% in Yemen, and 54.4% in Egypt) and have a university education (61.7% in Sudan, 59.6% in Yemen, and 51.5% in Egypt). More than two-third of them (81.5% in Sudan, 64.0% in Yemen, and 68.0% in Egypt) have a relative who is a nurse. The study shows that more than half (54.0%) of the participants have no preferences regarding the gender of nurses (58.5% in Sudan, 54.5% in Yemen, and 46.6% in Egypt). However, regarding the nationality of nurses, 40.7% in Sudan, 48.9% in Yemen, and 52.4% in Egypt preferred nurses of same nationality, while 50.0% of the participants in Sudan, 43.8% in Yemen, and 38.8% in Egypt Preferred nurses of other nationality.

Table 2 indicates that more than half of the communities in the three Arabic countries rated nursing care they received as either very good or excellent: 63.7% Sudan, 56.7% Yemen, and 47.6% Egypt. Nearly two-third of the participants (68.1% in Sudan, 68.5% in Yemen, and 68.0% in Egypt) considered nursing duties as providing medical care follow-up and healthcare education; others considered their duties to be assisting doctors. The Arabic communities knew that nursing has different specialties: 84.3% in Sudan, 60.7% in Yemen, and 83.5% in Egypt.

The details of community perception toward nursing profession are shown in Table 3. A rating of 3.71 about the nursing profession is dangerous. The score of 3.68 was in response to nurses obeying doctor's orders without questioning them. There was a positive response (4.80) about the nursing profession being important to society. Figure **1** shows the community perception level

toward nursing profession in Sudan, Yemen, and Egypt.

The feedback from three communities about value and role of nursing profession in Sudan ranged from 3.56 to 4.98. In Yemen, the response ranged from 3.65 to 4.90, and 3.16 in negative perception to 4.99 as a positive perception in Egypt. Figure 1 shows the community perception level toward nursing profession in the three communities (Sudan, Yemen and Egypt). There were insignificant differences between the communities in terms of the social value and the role of nursing (P > 0.050).

Table 3 shows that the overall perception was 4.20 in Yemen and 4.30 in Sudan and Egypt. The level of community perception was categorized as

negative or positive between the three countries. Comparisons were made between the three Arabic countries (Sudan, Yemen, and Egypt) in their overall level of perception toward nursing profession, which was mostly positive: 97.6% in Sudan, 94.9% in Yemen, and 96.0% in Egypt. There is an insignificant relationship between the countries (P > 0.100).

The relationships between the demographic characteristics of participants and communities' perception toward nursing profession is shown in Table 4. Gender has an influence the level of perception in Sudan and Egypt (P < 0.050, P < 0.050), respectively. Women have a more positive perception toward the nursing profession in Egypt while men have a more positive perception toward the nursing profession in Sudan.

TABLE 1: Demographic characteristics of participants from three Arabic countries (Sudan, Yemen, and Egypt), N = 529.

Variables	Sudanese		Yer	neni	Egyptian		
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
Age (yr)							
17–29	102	41.1%	96	53.9%	41	39.8%	
30–39	78	31.5%	46	25.8%	37	35.9%	
40–49	49	19.8%	33	18.5%	15	14.6%	
≥50	19	7.7%	3	1.7%	10	9.7%	
Gender							
Men	92	37.1%	89	50.0%	25	24.3%	
Women	156	62.9%	89	50.0%	78	75.7%	
Marital status							
Single	92	37.1%	57	32.0%	36	35.0%	
Married	146	58.9%	116	65.2%	56	54.4%	
Divorced	10	4.0%	5	2.8%	11	10.7%	
Education							
Secondary school	28	11.3%	45	25.3%	14	13.6%	
University	153	61.7%	106	59.6%	53	51.5%	
Postgraduate	67	27.0%	27	15.2%	36	35.0%	
Do you have a relative who is a nurse							
Yes	202	81.5%	114	64.0%	70	68.0%	
No	46	18.5%	64	36.0%	33	32.0%	

TABLE 1: Continued.

Variables	Sudanese		Yer	neni	Egyptian	
Preferences based on gender						
Male nurse	31	12.5%	19	10.7%	7	6.8%
Female nurse	72	29.0%	62	34.8%	48	46.6%
No preferences	145	58.5%	97	54.5%	48	46.6%
Preferences based on nationality						
Same nationality nurse	101	40.7%	87	48.9%	54	52.4%
Other nationality nurse	124	50.0%	78	43.8%	40	38.8%
No preferences	23	9.3%	13	7.3%	9	8.7%

TABLE 2: Community responses towards the nursing profession in three Arabic countries (Sudan, Yemen, and Egypt), (N = 529).

	Sudanese		Yemeni		Egyptian				
Variables	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage			
	Rate of nur	sing care							
Poor	18	7.3%	11	6.2%	7	6.8%			
Good	72	29.0%	66	37.1%	47	45.6%			
Very Good	72	29.0%	57	32.0%	25	24.3%			
Excellent	86	34.7%	44	24.7%	24	23.3%			
	Suda	anese	Yen	neni	Egy	ptian			
	Nurse o	duties							
Provide medical care, follow-up and health education	169	68.1%	122	68.5%	70	68.0%			
Doctor assistant	79	31.9%	56	31.5%	33	32.0%			
	Nursing stu	ıdy period							
Three years	19	7.7%	27	15.2%	9	8.7%			
Four years	163	65.7%	101	56.7%	30	29.1%			
Five years	50	20.2%	33	18.5%	52	50.5%			
I don't know	16	6.5%	17	9.6%	12	11.7%			
Nursing has specialties									
Yes	209	84.3%	108	60.7%	86	83.5%			
No	39	15.7%	70	39.3%	16	15.5%			
I do not know	0	0.0%	0	0.0%	1	1.0%			

TABLE 3: The community perception toward the nursing profession in three Arabic countries (Sudan, Yemen, and Egypt), N = 529.

	Sudanese		Yemeni		Egyptian	
Variables	Mean	SD	Mean	SD	Mean	SD
Perception about the nature of the nursing profession	on					
Does nurses respect work ethics?	4.00	±0.95	3.89	±0.89	3.99	±0.92
Do you think the nursing profession is important to any society?	4.80	±0.48	4.74	±0.54	4.64	±0.78
Do you think nursing is a dangerous profession?	3.71	±1.22	3.51	±1.20	4.38	±0.94
Does nurse obey doctor's orders without questioning them?	3.68	<u>+</u> 1.19	4.72	±1.18	3.73	±1.21

TABLE 3: Continued.

	Sudanese Yemeni		Egyptian			
Perception about the nature of the nursing profession	on					
Is the nursing profession important in patient recovery?	4.69	±0.57	4.46	±0.69	4.61	±0.72
Does the nursing profession promote health and prevents disease?	4.56	±0.756	4.47	±0.73	4.56	±0.78
Is a certain education and legal license required to practice as a nurse?	4.73	±0.53	4.63	±0.63	4.68	±0.74
Social value and the role of nursing profession						
Does society appreciate nurses' work?	3.56	±1.07	3.65	±0.92	3.16	±1.11
Is the nursing profession seen by people as a servant's job?	4.79	<u>+</u> 1.21	4.70	±1.14	4.87	±1.02
Does the nursing profession conflict with the customs and traditions of the country?	4.26	±0.94	3.44	±1.05	4.17	0.91
Do you think nursing is a female-only profession?	4.21	±0.96	4.09	±0.92	4.99	0.73
Would you be ashamed to have a nurse in your family?	4.98	±0.93	4.90	±0.88	4.90	0.89
Perception about choosing nursing as a profession						
Would you recommend a career in nursing for females?	4.45	±0.82	4.27	±0.813	3.98	±1.04
Would you recommend a career in nursing for males?	4.25	±0.92	4.0	±0.894	4.2	±0.91
Would you allow your daughter, sister, or any of your relatives to be a nurse?	4.48	±0.79	4.20	±0.923	3.99	±1.01
Would you choose nursing as a profession?	4.37	±0.95	4.20	±0.947	4.10	±1.07
Average	4.30	±0 .90	4.20	±0.80	4.30	±0 .90

SD: standard deviation.

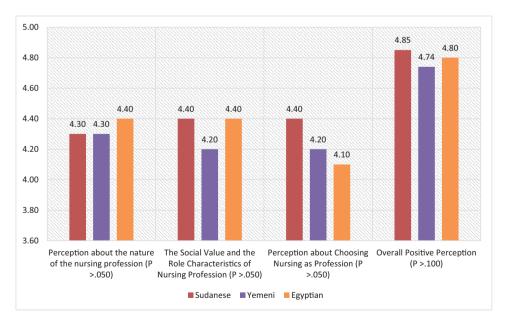


Figure 1: Comparison between three Arabic communities' perception (Sudan, Yemen, and Egypt) towards the nursing profession (N = 529).

TABLE 4: Relationship between the demographics and characteristics of the participants and community perception toward the nursing profession, N = 529.

Variables	Sudanese		Yemeni			Egyptian			
	Negative Perception	Positive Perception	P-value	Negative Perception	Positive Perception	P-value	Negative Perception	Positive Perception	P-value
Age (yr)									
17–29	2.9%	97.1%	>0.100	5.2%	94.8%	>0.100	2.4%	97.6%	>0.100
30–39	1.3%	98.7%		8.7%	91.3%		5.4%	94.6%	
40–49	2.0%	98.0%		0.0%	100.0%		0.0%	100.0%	
≥50	5.3%	94.7%		0.0%	100.0%		10.0%	90.0%	
Gender									
Men	0.0%	100.0%	<0.050**	5.6%	94.4%	>0.100	12.0%	88.0%	<0.050**
Women	3.8%	96.2%		4.5%	95.5%		1.3%	98.7%	
Marital status									
Single	1.1%	98.9%	<0.001**	7.0%	93.0%	>0.100	2.8%	97.2%	>0.100
Married	1.4%	98.6%		4.3%	95.7%		5.4%	94.6%	
Divorced	30.0%	70.0%		0.0%	100.0%		0.0%	100.0%	
Education									
Secondary school	0.0%	100.0%	>0.100	4.4%	95.6%	>0.100	0.0%	100.0%	>0.100
University	2.0%	98.0%		5.7%	94.3%		7.5%	92.5%	
Postgraduate	4.5%	95.5%		3.7%	96.3%		0.0%	100.0%	

^{**}Significant.

4. Discussion

The Sudanese, Yemeni, and Egyptian communities' perception toward nursing profession generally was positive. Most participants reflected a positive perception about the nursing profession. This finding is consistent with a study conducted in Saudi Arabia that investigated the Saudi community perception toward nursing profession, which showed that the overall perception of the nursing profession is changing to positive in most areas related to the nature of the nursing. Changes in the communities related to perception may be due to several factors including improved nursing education [22]. Similarly, a study in Pakistan investigated nursing students' perception toward nursing profession [25], which showed that nursing students have a positive perception regarding the nursing profession. Another study conducted in Saudi Arabia about Saudi nursing students' attitudes toward the nursing profession showed that most nursing students had a positive attitude toward the nursing profession [26]. Our results are similar to an Italian study, which showed that the general population and nursing students had a good perception and image of nurses [27].

The participants from the three communities showed positive responses in terms of nursing as a profession with an average mean of 4.30 out of 5. The results also showed that 81.5%, 64.0%, and 68.0% of Sudanese, Yemenis, and Egyptian, respectively, have a relative who works as a nurse. This might have played an important role in building a positive perception toward the profession. Several studies have found that having family members as a nurse leads to a positive attitude toward nursing [28]. Our findings are consistent with a study conducted in Jordan

[4] that investigated and compared first- and fourth-year nursing students' perception toward their profession: Most participants had a positive perception toward nursing. A survey in Zambia found that most students (69.7%) had a positive perception of the nursing profession, and 30.3% had a negative perception. Those with a negative perception in the Zambian study are likely due to uncertainty with career choice [29].

This study indicates that the communities who participated in this study appreciate the nursing profession. A study in Pakistan in 2017 found similar findings. They found that a significant number of participants agreed that nursing is well-appreciated profession in their society (25). However, the results are inconsistent with the findings showing that the nursing profession is not appreciated by Saudi society [26].

Our study illustrated a borderline statistical significance between Sudanese and Egyptian age and perception toward the nursing profession. Gender is the only factor influencing perception in Sudan and Egypt. Women have a higher positive perception toward the nursing profession in Egypt, and men have a higher positive perception toward the nursing profession in Sudan.

The limitations of the current study it is that it was conducted on a small sample size. Thus, the results are not generalizable. To the best of our knowledge, this is the first Arabic study to evaluate communities' perception of nursing. It is important to mention that online approach of data collection have limitations, including potential bias in selection, limited control over data quality, and difficulties in verifying participant identity and provided information.

5. Conclusion

This study found that the perception of participants from the three Arabic countries regarding the

nursing profession was acceptable. Gender is the only factor significantly affecting the level of perception toward the profession. Women from Egypt and men from Sudan have a significantly higher positive perception toward the nursing profession.

Declarations

Acknowledgements

The authors would like to acknowledge all participants in this study. They would like to declare that this manuscript was registered online as preprint titled, "Perception towards profession: nursing Α comparative study between Sudanese. Yemeni and Egyptian communities" (https://assets.researchsquare. com/files/rs-2119216/v1/a3788be5-55e4-40d6b175-12d44a9e573b.pdf?c=1673904486 with a DOI: https://doi.org/10.21203/rs.3.rs-2119216/v1).

Ethical Considerations

The study was approved on 2022, April 14 by the Research Ethical Board of the Faculty of Nursing, International University of Africa, Sudan, (Ethical Approval No: IUANF1404202204). A written informed consent to participate in the study was provided by all participants. We confirm that all methods used in this study were carried out in accordance with relevant guidelines and regulations. All participants provided written agreement before filling online questionnaire by clicking the box indicating that they have fully aware and agree to participate. The purpose of the study was fully explained to patients prior to their participation.

Competing Interests

The authors declare that this study is an original work and they have no conflict of interests related to it.

Availability of Data and Material

Available upon request from corresponding author.

Funding

None.

Abbreviations and Symbols

SPSS: Statistical Package of Social Sciences

RN: Registered nurse

SD: Standard deviation

COVID-19: Coronavirus disease 2019.

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