Original Article :

Healthcare Professionals' Awareness of The Patient Educator's Role in Saudi Arabia

Fatmah Almoayad, Asma H. Almalki, Reema A. Alsudayri, Shahad A. Alruwaili,

Department of Health Sciences, College of Health and Rehabilitation Sciences, Princess Nourah Bint Abdulrahman University, Riyadh, Saudi Arabia,

Received on Oct 21, 2022, accepted for publication on July 06, 2023, dx.doi.org/10.5455/mjhs.2023.04.007

Corresponding Author:

Fatmah Almoayad

Department of Health Sciences, College of Health and Rehabilitation Sciences, Princess Nourah Bint Abdulrahman University, Riyadh, Saudi Arabia, Princess Nourah Bint Abdulrahman University, +966118240711, P.O. Box 84428, Riyadh 11671, Saudi Arabia, Email faalmoayad@pnu.edu.sa

OPEN ACCESS Distributed under Creative Commons CC BY-NC-ND 4.0

Abstract

Background and Aims:
To assess healthcare professionals' awareness of the patient educator's role and identify the association between their level of awareness and different sociodemographic variables in Saudi Arabia.

Methods:
The study design was cross-sectional; 387 healthcare professionals in Saudi Arabia were recruited by the researchers through convenience sampling. The researchers collected the data using an online questionnaire, and the analysis was done with the JMP software. The study duration was from January to April 2022.

Results:
Approximately 51.59% of the sample demonstrated a satisfactory level of awareness regarding the patient educator's role, and the other 48.41% showed a fair level. Misconceptions among the participants were common: 53.44% believed patient educators performed wound care, 52.91% that they checked patient vital signs, and 50.26% that they performed physical exams. Awareness levels were associated with gender, profession, job classification, bachelor's degree university, level of education, knowing about patient education and receiving courses on patient education.

Conclusions:
The research highlights varied awareness and misconceptions about patient educators among healthcare professionals, with ties to sociodemographic factors. Researchers recommend further investigation, clearer job descriptions, and interdisciplinary education to address these issues.

Keywords:
Professional Role; Health Educator; Healthcare professionals; Saudi Arabia.

Introduction

Patient education, which is defined as the process of influencing patient behaviour and producing the changes in knowledge, attitudes, and skills necessary to maintain or improve health"[1] has undergone several changes over the course of its history leading to an integration into healthcare systems across the world [2, 3].

There are variations in the development of patient education services across various health systems around the world. Several countries provide comprehensive patient education services, but others are still developing or have limited patient education programs [4]. In Saudi Arabia in specific, the Saudi Commission for Health Specialities (SCHS) first included health education as a classification of health workers in 2004 making it a relatively new profession in the country [5]. Understanding the role of educators in Saudi Arabia is particularly important as the country is considering a health sector transformation program as part of achieving its Saudi Vision 2030 goals [6]. Health educators play a vital role in the transfer, interpretation, and utilisation of healthcare information [7]. They influence health and advocacy practices and impact the change of health values and beliefs of community members by developing, assessing, and providing high quality, culturally competent materials and skills. Health educators address patients' needs by planning and providing programs and treatment operations [8].

The National Commission for Health Education Credentials defined eight areas of responsibilities for health educators[9]. These responsibilities aim to increase patient adherence with healthcare plans and maintain and improve patients' quality of life [8]. These responsibilities are as follows:

1. Assess population needs, resources, and the capacity for health education/ promotion.
2. Plan and develop educational programmes for individuals and envision a healthy, desirable outcome for health education/promotion.
3. Implement health education/promotion.
4. Evaluate, which is a crucial area of responsibility, to improve upon any weaknesses, and also conduct research related to health education/promotion.
5. Advocate for health education/promotion (advocacy is defined as "the processes by which the actions of individuals or groups attempt to bring about social and/or organisational change on behalf of a particular health goal, programme, interest, or population").
6. Communicate.
7. Lead and manage.
8. Act ethically and professionally (this

was the newest addition to the original seven areas) [9, 10],

A health educator's role goes beyond delivering health information to individuals and the public; empowering individuals, shifting society perspectives on health, and improving community health is where they shine [11].

To understand the role of patient educators in Saudi Arabia, a document analysis of job descriptions was conducted. This analysis revealed common areas of responsibilities and some minor differences. In general, the educators were expected to provide education for all patients, conduct daily patient rounds/visits, assess the educational needs of patients and their families through the collection of necessary data, cooperate with other technical personnel working on health education, evaluate the effectiveness of educational services, create and implement health programmes, and create and evaluate educational materials for patients. All the responsibilities of patient educators are first for the benefits of the patient, and if needed, they may expand to reach the family and the patient's surroundings to achieve maximum benefits.

Working in a healthcare setting does not support complete independence. Each speciality depends on the others, and there is no speciality that can work alone; they form one big team [12]. Achieving effective teamwork requires understanding different roles within the team; this accentuates the importance of healthcare professionals' awareness of the role of patient education[12].

Being from a newer professional area leaves patient educators facing two challenges regarding the awareness of their role: role ambiguity and a lack of formal recognition [3]. Role ambiguity refers to "a situation caused by uncertain expectations and responsibilities in the performance of a particular role"[13]. Furthermore, when there is a lack of knowledge about what the role is, its characteristics, and performance outcomes, role ambiguity takes place. This ambiguity towards the patient educator role could come from various sources, such as colleagues, patients, and sometimes even supervisors [3].With uncertainty of one's role and, in this case, of patient educators' responsibilities among their colleagues, feelings of having a lower-class role among other healthcare professionals can be generated. This can create an even greater problem if the source of these feelings is supervisors. If some supervisors understand a patient educator's role and others do not, it may also create an uneven workload for educators and an unfair workplace [2, 14]. A lack of clarity regarding the patient education role can lead to edu-

cators feeling isolated from their peers and feeling unappreciated and undervalued by their supervisors [2, 15]. Nurse educators have been faced with role ambiguity in their work environment as well, but they have still been noted as having high levels of job satisfaction [16].

It is necessary to clarify individual responsibilities as patient, provider, and organisational needs change, to prevent losing or duplicating specific components of patient care [17]. A lack of formal recognition has been found to be a challenge in two different settings regarding patient educators; one study discussed the challenges facing patient educators in Toronto, Canada, and another study was conducted on patient education trainees in Saudi Arabia [2, 3].Two intertwined aspects found in these studies are the lack of formal recognition and the lack of organisational support [2]. Organisational support increases the meaningfulness of one's role, motivates professionals to do their best, and creates a supportive working environment; the opposite arises with the lack of it [18].

This study sought to gain a better understanding of the awareness level of a health educator's role among healthcare providers in Saudi Arabia. A patient educator faces several challenges, such as role ambiguity, role recognition, and role clarification. These challenges produced several consequences among health educators, such as uneven workloads; strong negative feelings towards their jobs, peers, and organisations; a perceived lack of priority; and feelings of being undervalued in the workplace [2]. This study suggests that all these challenges and their consequences stem from a lack of awareness of the role of a patient educator.

In general, no previous study has been conducted to assess the awareness of the health educator's role and the magnitude of this problem. However, as cited earlier, a previous qualitative study was conducted by Almoayad in 2015 on the challenges facing trainees in the health education profession, including the challenges of being from an emerging profession in the health sector and feelings from a lack of formal recognition.

The aim of this study was to assess healthcare professionals' awareness of the patient educator's role and identify the association between their level of awareness and different sociodemographic variables in Saudi Arabia

Materials and Methods

Overview

This was a descriptive cross-sectional study to assess healthcare professionals' awareness of the patient educator's role in Saudi Arabia that was conducted from Jan-

uary to April of 2022.

Participants

The participants were healthcare interns and licenced practitioners, both Saudi and non-Saudi, regardless of their gender and age. A desired sample size was calculated with a confidence level of 95%and a degree of error of 0.05 to be 385 participants. A non-probability convenience sampling technique was used due to time constraints in recruiting the participants. The researcher achieved 402 responses; after deleting all the participants who did not meet the inclusion criteria or who had inconsistencies in their responses, the final sample size was 378 participants.

Data collection

An online self-administrated survey was developed by the researchers in Google Forms based on a document analysis of the job descriptions of patient educators in Saudi Arabia. The survey was available in English and was distributed through various social media platforms including WhatsApp and telegram professional groups. The questionnaire consisted of 27 questions divided into three sections: sociodemographic, participant general information, and awareness.

Sociodemographic. There were eight questions that gathered information on gender, level of education, the university from which a bachelor's degree was obtained, occupation, work region, SCHS licence status, SCHS classification, and working experience in years (categorised as less than one year, one to less than four, four to less than nine, and nine and above)[19].

Participants' general information.

Two questions were included in this category. One asked the participants if they knew what patient education was. The second asked the participants if they had received any courses in health education.

Role awareness.

A total of 17 questions assessed healthcare professionals' awareness of the patient educator role. The participants were asked to express the extent to which they agreed that the stated responsibilities fit with the role of a health educator. A 5-point Likert scale was used, ranging from strongly agree to strongly disagree 20. The survey contained four "reversed" questions: conduct physical exams; check a patient's vital signs; draw blood and perform other health-related testing; and perform wound care for patients, such as cleaning and bandaging them.

Validity and reliability

A pilot test was conducted with 30 people from the desired population. As there was no modification to the ques-

tionnaire items, their data were included in the sample. The validity was examined using probability correlation. Questions were significantly correlated with the total score, having r values of more than 0.3, which was considered an acceptable value which was considered an acceptable value for the correlations ($p < 0.05$). [21]. The questionnaire reliability was examined using Cronbach's alpha ($\alpha = 0.7991$) and was considered good [22].

Data analysis

JMP version 16.2.0 was used to analyse the data; the descriptive data were presented in graphs and frequency tables as numbers and percentages. Inferential statistics were conducted using a two-independent sample t-test, one-way ANOVA, and the Kruskal-Wallis test. Seventeen questions assessing awareness were answered using a five-point Likert scale (ranging from a score of one for strongly disagree to five for strongly agree). Four questions were "reversed" because they were not from the patient education role (i.e., "agreement" on these would represent a misunderstanding of the role). Categorisation was conducted using a formula based on the highest score of 85 and the lowest score of 17. Three categories were created: poor, fair, and good. Participants with scores from 17 to 39 were considered to have poor awareness; those with scores from 40 to 62 had fair awareness, and those with scores from 63 to 85 had good awareness. Based on 95% confidence, significance was determined by P-values <0.05.

Ethical considerations

An IRB approval (#22-0005) was obtained from Princess Nourah bint Abdulrahman University. Informed consent was displayed at the first page of the questionnaire. The participants were informed that they had the right to withdraw from the questionnaire study at any point and that their participation was completely voluntary.

Results

Table I displays the sociodemographic characteristics of the studied sample. Approximately 55.92% of the participants were female. The central region accounted for 64.55%. About 81.22% of the participants were licenced healthcare professionals, and the other 24.04% were intern students. As for academic degree, holders of a bachelor's degree accounted for 71.43%; 48.94% of the participants received their bachelor's degree from universities that provided health education programmes. The participant's classifications varied from interns to consultants, with 45.08% of them being specialists. As for their profession, 32.54% were allied healthcare professionals, and 18.78% were health

educators. The working experience of the participants ranged from less than one year to more than nine years; 38.2% of the sample had working experience of one year to less than four years. Approximately 82.8% of the participants believed that they knew what health education was, and 69.95% of them had received a course in health education.

Table I. Sociodemographic characteristics of the studied sample.

Factors	Subdivisions	N	%
Gender (n = 378)	Female	209	55.29%
	Male	169	44.71%
Region of work (n = 378)	Eastern Region	27	7.14%
	Central Region	244	64.55%
	North Region	15	3.97%
	South Region	32	8.47%
	Western Region	60	15.87%
SCHS license (n = 378)	Absent	71	18.78%
	Present	307	81.22%
Level of education (n = 378)	Diploma	26	6.88%
	Bachelor's degree	270	71.43%
	Master	40	10.58%
	PhD	42	11.11%
Bachelor's degree university (n = 376)	Universities that provide health education program	184	48.94%
	Non-Saudi university	43	11.44%
	Other Saudi university	149	39.63%
Profession (n = 378)	Physician	71	18.78%
	Dentist	16	4.23%
	Pharmacy	34	8.99%
	Nursing	63	16.67%
	Health education	71	18.78%
	Allied health professionals	123	32.54%
Working experience (n = 356)	Less than one year	69	19.38%
	One to less than four	136	38.2%
	Four to less than nine	65	18.26%
	Nine and above	86	24.16%
SCHS classification (n = 366)	Intern student	88	24.04%
	Technician	28	7.65%
	Resident	18	4.92%
	Specialist	165	45.08%
	Senior specialist	26	7.1%
	Consultant	33	9.02%
	Senior consultant	7	1.91%
	Consultant specialist	1	0.27%

Factors	Subdivisions	N	%
Receiving health education courses (n = 376)	No	113	30.05%
	Yes	263	69.95%
Knowing about health education (n = 378)	No	25	6.61%
	Not sure	40	10.58%
	Yes	313	82.8%

Table II shows the awareness among the study sample. Approximately 51.59% of the participants displayed a good level of awareness, while the other 48.41% demonstrated a fair level of awareness.

Four misconceptions were indicated by the participants, corresponding to the "reversed" items on the instrument; in other words, they were unable to identify them as not belonging. The scores for these were as follows: 53.44% agreed that performing wound care for patients, such as cleaning and bandaging them, is a patient educator role; 38.89% agreed that drawing blood and performing other health-related testing is a patient educator role; 52.91% agreed that checking patients' vital signs is a patient educator role; and 50.26% agreed that conducting physical exams is a patient educator role.

Table II. Awareness of patient education role among the sample (n=378).

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	n	%	n	%	n	%	n	%	n	%
Performing wound care for patients, such as cleaning and bandaging them	92	24.34%	110	29.1%	55	14.55%	63	16.67%	58	15.34%
Draw blood and perform other health-related testing	65	17.2%	82	21.69%	76	20.11%	68	17.99%	87	23.02%
Check a patient's vital signs	107	28.31%	93	24.6%	62	16.4%	59	15.61%	57	15.08%
Conduct physical exams	71	18.78%	119	31.48%	80	21.16%	51	13.49%	57	15.08%
Identify and analyse factors that influence health behaviours	211	55.82%	129	34.13%	31	8.2%	6	1.59%	1	0.26%
Identify and analyse factors that foster or hinder the learning process	160	42.33%	147	38.89%	53	14.02%	11	2.91%	7	1.85%
Identify policies related to health education/promotion	198	52.38%	119	31.48%	51	13.49%	8	2.21%	2	0.53%
Conduct pilot test of strategies/ interventions	122	32.2%	141	37.3%	81	21.43%	26	6.88%	8	2.12%
Use theories and/or models to guide the delivery plan	170	44.97%	133	35.19%	54	14.29%	15	3.97%	6	1.59%
Develop marketing plan to deliver health program	127	33.6%	127	33.6%	90	23.81%	29	7.67%	5	1.32%
Implement marketing plan related to a health program	106	28.04%	143	37.83%	95	25.13%	29	7.67%	5	1.32%
Develop financial plan related to an awareness program	89	23.54%	132	34.92%	112	29.63%	35	9.26%	10	2.65%

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	n	%	n	%	n	%	n	%	n	%
Identify level of literacy of intended audience	137	36.24%	151	39.95%	69	18.25%	19	5.03%	2	0.53%
Deliver messages using media and communication strategies	183	48.41%	119	31.48%	57	15.08%	14	3.7%	5	1.32%
Identify and analyse factors that foster or hinder knowledge acquisition	135	35.71%	157	41.53%	74	19.58%	6	1.59%	6	1.59%
Identify and analyse factors that influence attitudes and beliefs	149	39.42%	142	37.57%	63	16.67%	16	4.23%	8	2.12
Develop policies to promote health using evidence-based findings	174	46.03%	147	38.89%	41	10.85%	11	2.91%	5	1.32%
Total awareness score	Good				Fair				Poor	
N	195				183				0	
%	51.59%				48.41%				0%	

Table III indicates the association between the awareness of the role of patient education among healthcare professionals and different sociodemographic factors. It was found that awareness for females (65.84 ± 8.9) was significantly higher than for males (62.28 ± 8.03) (t = -4.07, P = 0.0001). A significant association between awareness and level of education was found; respondents with a diploma (57.03 ± 6.35) showed significantly lower amounts of awareness than any other level of education: bachelor's (64.54 ± 8.62), master's (64.7 ± 7.93) and PhD (66.47 ± 9.17) [F= 7.36, P = 0.0001]. People who claimed to know about health education (65.53 ± 8.67) were found to be significantly more aware of the patient educators' role than people who claimed they did not know (57.76 ± 4.92) or were not sure (58.3 ± 6.17) [F= 21.92, P = 0.0001]. Another significant association was between receiving health education courses (65.03 ± 8.88) compared to not receiving them (62.22 ± 7.83) and a higher level of awareness (t = 3.06, P = 0.0024). Participants who graduated from universities that provided health education programs (65.86 ± 8.98) showed a higher level of awareness than participants from both other Saudi universities (62.49 ± 7.92) and non-Saudi universities (62.86 ± 8.58) [F= 7.01, P = 0.001]. Profession was also found to be significantly associated with awareness; health educators (72.08 ± 8.53) revealed a higher level of awareness compared to all other professions: physicians (63.5 ± 8.76) dentists (59.37 ± 7.32), pharmacy (61.2 ± 7.81), nursing (62.44 ± 7.23), and allied health professionals (62.57 ± 7.21) [F= 18.33, P = 0.0001]. Regarding classification, it was found that specialists (Mdn =

66, IQR = 14.50) had significantly higher levels of awareness than technicians (Mdn = 60, IQR = 6.75), residents (Mdn = 60, IQR = 11.25), and interns (Mdn = 59, IQR = 11.75). In addition, senior consultants (Mdn = 59, IQR = 5.00), and senior specialists (Mdn = 68.5, IQR = 14.50) had higher amounts of awareness than interns (Mdn = 59, IQR = 11.75) and technicians (Mdn = 60, IQR = 6.75) [F= 28.48, P = 0.0002].

Table III. Association between the awareness of patient education role among healthcare professionals and different sociodemographic factors (n = 378)

Factors	Subdivisions	N	Mean	Std Dev	Test of significant	Test value	P-value
Gender	Female	209	65.84	8.9	Two independent sample t-test	-4.07	0.0001*
	Male	169	62.28	8.03			
Level of education	Diploma	26	57.03	6.35	One-way ANOVA	7.36	0.0001*
	Bachelor's	270	64.54	8.62			
	Master's	40	64.7	7.93			
	PhD	42	66.47	9.17			
Did they know about health education	No	25	57.76	4.92	One-way ANOVA	21.92	<.0001*
	Not sure	40	58.3	6.17			
	Yes	313	65.53	8.67			
Receiving health education courses	Yes	263	65.03	8.88	Two independent sample t-test	3.06	0.0024*
	No	113	62.22	7.83			
Profession	Physician	71	63.5	8.76	One-way ANOVA	18.33	<.0001*
	Dentist	16	59.37	7.32			
	Pharmacy	34	61.2	7.81			
	Nursing	63	62.44	7.23			
	Health education	71	72.08	8.53			
	Allied health Professionals	123	62.57	7.21			
Licence statues	Absent	71	62.84	9.26	Two independent sample t-test	1.44	0.15
	Present	307	64.58	8.54			
Bachelor's degree university	Universities that provide health education program	184	65.86	8.98	One-way ANOVA	7.01	0.001*
	Non-Saudi university	43	62.86	8.58			
	Other Saudi university	149	62.49	7.92			

Factors	Subdivisions	N	Mean	Std Dev	Test of significant	Test value	P-value
Working experience	Less than one year	69	64.98	8.88	One-way ANOVA	0.44	0.72
	One to less than four	136	64.54	8.92			
	Four to less than nine	65	63.5	8.24			
	Nine and above	86	64.54	8.92			
Classification	Intern student	88	59	11.75	Kruskal-Wallis	28.48	0.0002*
	Technician	28	60	6.75			
	Resident	18	60	11.25			
	Specialist	165	66	14.5			
	Senior specialist	26	68.5	14.5			
	Consultant	33	67	14.5			
	Senior consultant	7	59	5			
	Consultant specialist	1	64	0			
Region of work	Eastern Region	27	69	9	Kruskal-Wallis	9.26	0.0548
	Central Region	244	63	14			
	North Region	15	60	8			
	South Region	32	62.5	12.5			
	Western Region	60	62	12.75			

Discussion

This study aimed to assess healthcare professionals' awareness of the patient educator's role and identify the association between their level of awareness and different sociodemographic variables in Saudi Arabia. The results show that more than half of the participants demonstrated a satisfactory amount of awareness. This can be explained by the fact that more than two-thirds of the participants received health education courses, and almost half of them were from universities that provided a health education programme; those two factors were significantly associated with a higher level of awareness. In addition, by reviewing some health colleges study plans in Saudi Arabia it was noted that the curricula include a differentiation between healthcare professions, including patient education, which might be another reason for such a positive result. This finding contradicts that of Almoayad and Ledger [3] in which patient educators reported struggling with a lack of understanding of their role. However, the current study targeted health professionals from different speci-

ality areas and rankings, while Almoayad and Ledger explored the perceptions of health educator interns.

It should be noted, however, that almost half the participants had only a fair knowledge of the role. This is alarming, as health professionals have an obligation to understand the roles of those who work alongside them to ensure the delivery of patient care at the highest level of efficiency [12]. A study conducted on the role of interpersonal relations in healthcare team communication and patient safety in Canada suggested that patient safety is dependent on the communication and understanding among healthcare professionals of each other's role on the team [12]. In addition, high rates of misconceptions were found among healthcare professionals regarding the patient educators' role. Almost half the participants assumed that drawing blood, conducting physical exams, checking vital signs, and performing wound care were all included in the patient educator role. This indicates the lack of a clear understanding of the patient educator's role. This supports Almoayad and Ledger [3] findings which suggest a blurriness in roles and a poor distinction from other healthcare professions. Such confusion could be attributed to the fact that patient education is a relatively new profession in the field, and new professions are prone to this kind of misconception or misunderstanding [3, 15].

Another reason for these misconceptions could be related to the history of patient education in Saudi Arabia. In its early years, other health professionals were hired to practice it, such as nurses, and continuing to this day, nurses are still heavily involved in patient education responsibilities [5, 23]. In addition, patient education tasks are part of their job [24, 25]. This overlap may be the reason for such confusion between a patient educator's role and nurse's role.

This confusion is common in many new professions across the world. In the US, for example, the occupational therapist's role was poorly understood by other healthcare professionals in the context of hospice care [26]. Research regarding music therapists in Ireland reported that misconceptions concerning their role and not feeling understood or distinguished from other professions led them to work in isolation from colleagues regardless of the multidisciplinary nature of their work in healthcare settings [12, 15]. Another study conducted in the US discussed the global growth and development of dance/movement therapy and revealed that a consequence of having misconceptions about one's profession is feeling less valued than others in the workplace. Patient educators in Toronto, Canada reported feelings of less value and feeling that they were in a lower-tier job [2, 14].

More than one factor was significantly associated with the level of awareness. The data revealed that three-quarters of the participants said that they knew what health education was, and there was a significant difference between them and those who did not know or were not sure. A significantly higher level of awareness from participants who received their bachelor's degree from universities that provided health education programmes was displayed. This association shows the importance that being exposed to and familiar with a profession plays in having more awareness regarding its role. A study about the perception of allied health professionals on occupational therapy showed that exposure to occupational therapy through work and academic settings increased the knowledge and understanding of the role [27]. Moreover, female participants had higher levels of awareness; this can be attributed to the fact that most females in the study were from universities that provided health education programmes, which (as mentioned above) was associated with a higher level of awareness. With regard to the level of education, there was a significant association between a lower level of awareness regarding the patient education role and having a diploma degree. There are only three universities in Saudi Arabia that provide a health education programme, and the lowest level of education there is a bachelor's degree, so the absence of interactions between diploma holders and health education as a major could result in such an association.

Out of all the professions, health educators were associated with a higher level of awareness, and such a result, as much as expected, was important because it is essential to fully comprehend one's own role [28]. Patient educators having a clear understanding of their own role and their own responsibilities enhances the possibility of correcting any misconceptions about the profession and spreading awareness of the role among everyone who interacts with them. The results showed that dentists had the lowest level of awareness among health professionals. This can be explained by the lack of interaction between dentists and patient educators because dentists depend on a dental hygienist to provide patient education services [29]. There were eight participant classifications, and only two of them showed a significantly higher level of awareness: specialist and senior specialist. This was a disappointing finding, as it describes an obstacle to patient educators who interact with almost all healthcare professionals from all different classifications. It was discovered that there was a significant difference between those who received health education courses

and those who did not. This reinforces the importance of providing health education courses to health professionals to increase their exposure and awareness, as studies show that greater exposure to information increases the motivation to learn [30].

Conclusion

The researchers aimed to assess healthcare professionals' awareness of the patient educator's role in the current environment, to identify the association between their level of awareness and different sociodemographic variables, and to discover the underlying factors that influenced their level of awareness in Saudi Arabia. The results revealed that the level of awareness among healthcare professionals about the role of patient educators was almost equally split between good and fair. However, it was found that misconceptions regarding the role were common among the participants. Awareness levels were associated with almost all the sociodemographic factors: gender, profession, classification, bachelor's degree university, level of education, knowing about patient education, and receiving courses on patient education.

The researchers encourage further theoretical-based research to explore the effects of the workplace environment on job performance among health educators. Practical recommendations to entities responsible for healthcare profession job descriptions are to provide clear and distinguished job descriptions to different healthcare professions to avoid the overlapping of roles. Recommendations to universities include interprofessional education and multidisciplinary teamwork as part of health professional education.

Ethical Permission

An IRB approval (#22-0005) was obtained from Princess Nourah bint Abdulrahman University.

Conflicts of Interests

The authors declare no conflict of interest.

Funding

None

References

1. Lindeman CA. Patient Education. Annu Rev Nurs Res. 2000(1):29-60. doi:10.1891/0739-6686.6.1.29
2. George M. The Role, Strengths and Challenges of Health Educators in Toronto Hospitals. International Journal of Interdisciplinary Social Sciences. 2010;5(1):45–456. doi:10.18848/1833-1882/CGP/v05i01/53083
3. Almoayad FA, Ledger AJ. Entering a new profession: Patient educator interns' struggles for recognition. Journal

of Health Specialties. 2016;4(4):262-9.

4. Deccache A, Aujoulat I. A European perspective: common developments, differences and challenges in patient education. Patient education and counseling. 2001;44(1):7-14. doi:10.1016/S0738-3991(01)00096-9
5. Al-Hashem A. Health education in Saudi Arabia: historical overview. Sultan Qaboos University Medical Journal. 2016;16(3):e286. doi:10.18295/squmj.2016.16.03.004
6. Vision2030. Health Sector Transformation Program [Accessed 4 May 2022
7. Groene O, Alonso J, Klazinga N. Development and validation of the WHO self-assessment tool for health promotion in hospitals: results of a study in 38 hospitals in eight countries. Health promotion international. 2010;25(2):221-9. doi:10.1093/heapro/daq013
8. WHO. Therapeutic patient education: continuing education programmes for health care providers in the field of prevention of chronic diseases: report of a WHO working group. Geneva: World Health Organization. Regional Office for Europe; 1998.
9. NCHEC. Health Education Responsibilities Whitehall, PA2020 [Available from: https://www.nchec.org/health-education-responsibilities. Accessed 29 April 2022
10. Thompson A, Kerr D, Dowling J, Wagner L. Advocacy 201: Incorporating advocacy training in health education professional preparation programs. Health Education Journal. 2012;71(3):268-77. doi:10.1177/0017896911408814
11. Branscum P, Haider T, Brown D, Sharma M. Using emotional intelligence and social support to predict job performance of health educators. American Journal of Health Education. 2016;47(5):309-14. doi:10.1080/19325037.2016.1203840
12. Lee CT-S, Doran DM. The role of interpersonal relations in healthcare team communication and patient safety: a proposed model of interpersonal process in teamwork. Canadian Journal of Nursing Research. 2017;49(2):75-93. doi:10.1177/0844562117699349
13. Ahmad J, Zahid S, Wahid FF, Ali S. Impact of role conflict and role ambiguity on job satisfaction the mediating effect of job stress and moderating effect of Islamic work ethics. European Journal of Business and Management Research. 2021;6(4):41-50. doi:10.24018/ejbmr.2021.6.4.895
14. Dulicai D, Berger MR. Global dance/

movement therapy growth and development. The Arts in Psychotherapy. 2005;3(32):205-16. doi:10.1016/j.aip.2005.03.002

15. Ledger AJ. Am I a founder or am I a fraud? Music therapists' experiences of developing services in healthcare organizations. Ireland: University of Limerick; 2010.

16. Sayers J, Salamonson Y, DiGiacomo M, Davidson PM. Nurse educators in Australia: High job satisfaction despite role ambiguity. Journal of Nurse Education and Practice. 2015. doi:10.5430/jnep.v5n4p41

17. DiCenso A, Bourgeault I, Abelson J, Martin-Misener R, Kaasalainen S, Carter N, et al. Utilization of nurse practitioners to increase patient access to primary healthcare in Canada--thinking outside the box. Nursing Leadership (Toronto, Ont). 2010;23:239-59. doi:10.12927/cjnl.2010.22281

18. Montani F, Boudrias J-S, Pigeon M. Employee recognition, meaningfulness and behavioural involvement: Test of a moderated mediation model. The International Journal of Human Resource Management. 2020;31(3):356-84. doi: 10.1080/09585192.2017.1288153

19. Nano D, Mema B, editors. The Impact of Work Experience on Students' Financial Behaviour. Proceedings of the 2017 International Conference on E-Education, E-Business and E-Technology; 2017.

20. Likert R. A technique for the measurement of attitudes. Archives of psychology. 1932:44-53.

21. Gertsman B. Basic Biostatistics: Statistics for public health practice.. Burlington, MA. Jones & Bartlett Learning, LLC; 2015.

22. Gliem JA, Gliem RR. Midwest research-to-practice Conference in Adult, Continuing, and Community education. Ohio State University. 2003:82-8.

23. Park MY. Nurses' perception of performance and responsibility of patient education. Journal of Korean Academy of Nursing. 2005;35(8):1514-21. doi:10.4040/jkan.2005.35.8.1514

24. Norton L. Health promotion and health education: what role should the nurse adopt in practice? Journal of advanced nursing. 1998;28(6):1269-75. doi:10.1046/j.1365-2648.1998.00835.x

25. MOH. Head Nurse: Job Description. In: Nursing GDo, editor. Riyadh Ministry of Health 2010.

26. Knecht-Sabres LJ, Weppner A, Pow-

ers C, Siesel B. Do health-care professionals really understand the role of occupational therapy in hospice care? American Journal of Hospice and Palliative Medicine®. 2019;36(5):379-86. doi:10.1177/1049909118812858

27. Wan Yunus F, Ahmad Ridhuwan NF, Romli MH. The Perception of Allied Health Professionals on Occupational Therapy. Occupational Therapy International. 2022;2022. doi:10.1155/2022/2588902

28. Petri L, editor Concept analysis of interdisciplinary collaboration. Nursing forum; 2010: Wiley Online Library.

29. Bell KP, Phillips C, Paquette DW, Offenbacher S, Wilder RS. Dental hygienists' knowledge and opinions of oral-systemic connections: implications for education. Journal of dental education. 2012;76(6):682-94. doi:10.1002/j.0022-0337.2012.76.6.tb05302.x

30. Ditta AS, Strickland-Hughes CM, Cheung C, Wu R. Exposure to information increases motivation to learn more. Learning and Motivation. 2020;72:101668. doi:10.1016/j.lmot.2020.101668