

Research Paper



Evaluation of the nurses' understanding of disease prevention and health promotion in primary health care centres in Al-Diwaniyah

Haider Kadhum Raddam^{1*}, Aqeel Abd Al-Hamza Marhoon²

^{1*}Assistant Lecturer in the Department of Community Health Nursing at the Faculty of Nursing, University of Al-Qadisiyah, located in Al-Diwaniyah, Qadisiyah, Iraq.

²Assistant Lecturer in the Department of Paediatric nursing, at the Faculty of Nursing, University of Al-Qadisiyah, located in Al-Diwaniyah, Qadisiyah, Iraq.

Article Info

Article History:

Received: 06 March 2024

Revised: 12 May 2024

Accepted: 20 May 2024

Published: 04 July 2024

Keywords:

Evaluation

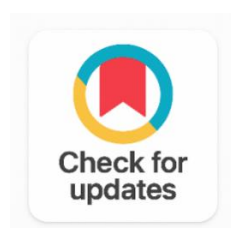
Encouragement of Well-Being

Prevention of Illness

Centre for Initial Medical Care

Nurses

Knowledge Assessment



ABSTRACT

Background: Nurses working in primary health care settings, do a huge job in health promotion as well as disease prevention, but in Iraq, especially inside primary health care, what they actually know about these things is still not clearly, and sort of not properly, recorded.

Objective: This study aimed to find out how good the nurses knowledge levels are, regarding health promotion and disease prevention, at primary healthcare clinics in Al-Diwaniyah municipality Iraq.

Methods: We did a descriptive study from January 15, until May 26 2023 across 11 primary healthcare centres in Al-Diwaniyah city. We selected, in a fairly random way, a total of 150 nurses. Data was gathered through a structured questionnaire, using a personal interview approach, and each interview took about 10 minutes. The questionnaire was checked and validated by the Iraqi Ministry of Health. It had four main parts: (1) community partnership and mobilisation; (2) the local council of the primary healthcare centre; (3) communication for behaviour modification; and (4) health promotion and disease prevention. For the analysis we used the weighted average method.

Results: Overall, the study sample showed very strong knowledge in health promotion and disease prevention, and this was seen in all the four measured domains.

Conclusions: Nurses in Al-Diwaniyah primary healthcare centres, have a high level of knowledge about health promotion and disease prevention.

Corresponding Author:

Haider Kadhum Raddam

Assistant Lecturer in the Department of Community Health Nursing at the Faculty of Nursing, University of Al-Qadisiyah, located in Al-Diwaniyah, Qadisiyah, Iraq.

Email: haider.kadhum@qu.edu.iq

Copyright © 2024 The Author(s). This is an open access article distributed under the Creative Commons Attribution License, (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. INTRODUCTION

Patients may obtain healthcare services in addition to clinical care provided by health workers for promoting health and preventing diseases at home and abroad [1]. Health facilities and health promotion and Services for the prevention of diseases are currently accessible. Enhance patient well-being and mitigate illness Minimize workload, enhance and optimize cost effectiveness The study conducted by focuses on the professional expertise of nurses. Assessing the nurse's viewpoint and comprehension are crucial methods for comprehending the positive aspects of providing and receiving health care [2], and can assist in identifying effective strategies to improve the efficiency and effectiveness of providing services. Health promotion refers to the process of empowering individuals to take charge of their own health and well-being. Assume greater authority over your well-being and enhance your overall health. Disease prevention refers to the actions taken to avoid the occurrence or spread of diseases (World Health Organization, 2021) [3]. Minimize the occurrence of risk variables and proactively avoid their occurrence. The occurrence of sickness aims to impede and decelerate its advancement. Once a situation is firmly established, there are subsequent outcomes or repercussions that follow (World Health Organization, 2021) [3]. Lifestyle-related disorders, such as cardiovascular disease, Diabetes type 2, chronic pulmonary disease, and certain malignancies persist as the main contributors to prolonged disability and untimely mortality [4]. Engaging in tobacco consumption poses substantial health hazards. Alcohol consumption, insufficient physical activity, and an unhealthy diet are major risk factors for this chronic illness and have a substantial influence on general health and quality of life [5]. Furthermore, these activities also have detrimental effects on one's health. Cluster formation, synergistic effects generation, and illness risk improvement can be achieved [6]. There is substantial data indicating the effectiveness of health promotion interventions [7] and the guidelines for clinical practice for the promotion of health and prevention of diseases related to lifestyle. Founded according to [8]. However, the execution remains ordinary the implementation of Primary Health Care (PHC) has had sluggish advancement and inconsistent results, as noted by [9]. There are numerous factors that contribute to inadequate execution. The aforementioned measures, presented at the organizational, structural, and technical levels, provide substantial obstacles to healthcare delivery [10]. Promote the use of proactive primary healthcare among professionals. Challenges encompass limitations in terms of time and a dearth of resources [10]. Give priority to making healthy changes in behavior and views. The role of healthcare professionals (HCPs), along with their unfavorable attitudes and insufficient skills and knowledge, has been discussed by [10]. Interventions aimed at promoting healthy behaviors in primary health care should prioritize this objective. Address and enhance healthcare practitioners' comprehension of patient Health care practitioners must fulfill the qualifications to implement interventions. in their daily clinical practice. Deliver instruction to diverse professional cohorts [10]. The influence of enhanced health promotion strategies on basic healthcare Enhancing population health can be achieved by adhering to the guidelines set forth by the World Health Organization. The World Health Organization (2022) [11] advises giving priority to promoting healthy lifestyles in primary healthcare facilities. Execute tactics and instructions that are supported by empirical evidence. Frequently necessitates modifications in clinical practice The context in which change takes place is a significant factor [12]. HCP behavior adjustment is necessary as clinical practice evolves. Technique Analyze and rank obstacles and connect strategies Surmount obstacles and involve final users Suggest modifications to healthcare professional conduct [13]. To achieve more success, it may be advantageous to modify your healthy behaviors. Healthcare professionals (HCPs) demonstrate effectiveness when they are able to exert influence over the process of change. Anticipate and appreciate the occurrence of change [14].

2. RELATED WORK

Health promotion interventions aimed at facilitating individuals' adoption of healthier behaviors and modifications to their lifestyle. To achieve an optimal condition of health, it is necessary to take certain measures (Ministry of Health, Republic of Iraq, 2012) [15]. In order to enhance the well-being of individuals receiving medical care Nurses possess the capacity to enhance health promotion within the boundaries of their professional responsibilities. Clinical practice, in addition to the conventional practice of managing a patient's sickness Chronic diseases associated with lifestyle accounted for 28.9% of all fatalities in Iraq. (World Health Organization, 2020) [16] (Excluding the Kurdistan Region) [17]. It also signifies the proportion of individuals admitted for chronic conditions, specifically 11.9 per 1000 individuals, across Iraq in the year 2012. The proportion of hospitalized patients with illnesses was calculated. The prevalence of chronic diseases is 9.4 per 1000 individuals, as reported by Carolina in 2008 [18]. The word is definite research that is indicate specific noun phrase. etiology of many disorders remains unknown, behavioral variables such as an unhealthy diet and excessive energy intake have been implicated. The World Health Organization (2000) identifies physical inactivity and tobacco use as contributing factors. The index more than or equal to 25 kg/m². Correlation between primary and alterable risk factors Chronic diseases have similarities across all global locations (World Health Organization, 2004) [19]. adjustable risk factors Serve as the fundamental cause of significant chronic illnesses. These risk factors account for the bulk of chronic diseases. Global mortality rates due to various diseases across genders and age groups. The items encompass Poor nutrition; Lack of exercise Smoking or consumption of tobacco products. Annually, a minimum of 4.9 million individuals perishes due to tobacco consumption. 2.6 million individuals perish due to the condition of being overweight or obese. A total of 4.4 million individuals succumb to elevated levels of total cholesterol, while 7.1 million people perish due to excessive blood pressure throughout all global areas. Within the hospital setting, significant proportion Admissions pertain to people who are afflicted with one or several chronic illnesses. The individuals referred to patients as documented by the ministry of health, republic of iraq in 2012 [15]. They require assistance to manage their illness and implement certain modifications to their way of life. Nevertheless, health promotion initiatives should not be haphazard, but instead well organized as a method A fundamental component of hospital care (World Health Organization, 2004) [19]. To accomplish this, it is necessary to have explicit criteria to direct the process. Hospitals should be organized in a comprehensive manner to support and promote health activities. It is important to acknowledge that health promotion is a key aspect of healthcare. Health promotion should be recognized as a valid responsibility for doctors and nurses [20], [21]. comprising In the field of nursing, achieving and maintaining a disease state requires a continual and active effort. Wellness is a term used by the ministry of health, republic of Iraq in 2012 [15]. There is a dearth of research in iraq pertaining to the promotion of health among nurses. It is necessary to investigate the knowledge and attitudes of nurses working in secondary care about health promotion.

3. METHODOLOGY

- **The Objective of Study:** To assess the nurses' level of knowledge on health promotion and sickness prevention at basic healthcare centers in the city of Al-Diwaniyah. To determine the demographic characteristics of the participants in the study.
- **Approach of the Study:** A Quantitative Approach An evaluative study was conducted to assess the level of knowledge among nurses working This study focuses on health promotion and disease prevention at primary health care clinics located in Al-Diwaniyah city. The study encompassed male and female nurses employed in several healthcare facilities, including Al-Furat, Al-Jadida, Al-Talieh, Al-Taqiya, Al-Orouba, Algeria, and the first, second, third, and fourth Al-Sadr Centers, as well as the Al-Gomhouri Center for Primary Health Care.
- **The Sample Used for the Study:** The study sample consisted of 150 nurses who were employed at primary health care institutions in Al-Diwaniyah city. The methodology utilized in this study was a non-probability sampling technique known as purposive sampling.

- **Place of Research:** Investigating the importance of Primary healthcare centres located in the municipality of Al-Diwaniyah.
- **Questionnaires:** The surveys are derived from the health promotion and illness prevention tool that has received approval from the Iraqi Ministry of Health. These questionnaires are utilized to evaluate the proficiency of nurses in health promotion and illness prevention, specifically for the primary health care centre in Al-Diwaniyah city. The study instrument of two portions, which were distributed in the following manner: The personal information component consists of four aspects: Age, academic achievement, the number of training courses completed in the field of health promotion and disease prevention, and years of experience. The second component is the nurses' comprehension of health promotion and disease prevention, which encompasses activities such as community participation and mobilization, the local council of primary health care facilities, behaviour change messaging, and health promotion and disease prevention. The questionnaire consisted of 20 items presented as questions, which the nurses were required to answer by selecting one of the options: (Applicable), (Partially Applied), or (Not Applicable).
- **The Questionnaire's Reliability:** was assessed by computing the Cronbach α value, which ranged from 0.7 to 0.9, indicating good internal consistency. The calculation results indicate that the internal consistency score, as measured by the Cronbach α value, was 0.865. The data obtained and the answers based on the questionnaire showed a high level of internal consistency. This indicates that the questionnaire is specifically designed to be applicable for investigating the occurrence within the same population at any point in the future.
- **Questionnaire Validity:** Validity pertains to the capacity of an instrument to accurately assess the specific variables it is designed to assess. Experts from different disciplines were given instruments to assess the questionnaire's validity (8).
- **Data Collection:** The data for the current study was obtained using the interview methodology. The personal information was acquired via interviews with the nurses, utilizing a modified and flexible questionnaire approach. The nurses require around 30 to 40 minutes to conduct the interview and complete the questionnaire format with the assistance of the investigator. The primary healthcare facilities in Al-Furat, Al-Talieh, Al-Jadida, Al-Taqiya, Al-Orouba, and Algeria, as well as the Al-Sadr Centre (first, second, third, fourth), and the Al-Gomhouri Centre in Al-Diwaniyah city, will be operational from March 3rd, 2023 to April 5th, 2023.
- **Data Analysis:** The researcher employed the weighted mean as it relies on accurately getting answers when there is a correlation among them. Additionally, the researcher utilized the percentage weight law to illustrate the significance of each paragraph in the questionnaire and its role in understanding the results.

4. RESULTS AND DISCUSSION

Table 1. The Current Research Sample was Deliberately Chosen, with a Sample Size of 150 Nurses

No.	Centers Name	Number of Nurses
1	Al-Sadr 1 st health center	15
2	Al-Sadr 2 nd health center	15
3	Al-Talieh health center	10
4	Al-Furat health center	15
5	Al-Gomhouri health center	15
6	Al-Orouba health center	5
7	Al-Sadr 3 rd health center	15
8	Al-Sadr 4 th health center	15
9	Al-Jadida health center	25
10	Al-Taqiya health center	10
11	Al-jazaie health center	10

Total	150
-------	-----

Table 2. The Number and Percentage of Years old for Sample

No.	Number of Years Old of Sample	Number	Rate%
1	Less than 20	26	17.4
2	20-29	34	22.6
3	30-39	75	50
4	More than 40	15	10
	Total	150	100

Table 3. The Number and Percentage of the Functional Address

No.	Functional Address	Number	Rate%
1	Nursing preparatory school	78	52%
2	Nursing Diploma	52	34.6%
3	Bachelor of Nursing Sciences	15	10%
4	Master of Nursing Sciences or more	5	3.4%
	Total	150	100%

Table 4. The Number and Percentage of the Number of Years of Service

No.	Number of Years of Service	Number	Rate%
1	Less than 10	53	35.4
2	10-29	79	52.6
4	More than 30	18	12
	Total	150	100

Table 5. Represents the Training Course in Health Promotion and Disease Prevention

Training Course In Health Promotion and Disease Prevention		Rate%
Yes	67	44.6
No	83	55.4
	Total	100

Table 6. The Weighted Mean and Percentage Weight are Used to Evaluate the Nurses' Knowledge Regarding Health Promotion and Disease Prevention in A Primary Healthcare Centre, with a Focus on Community Partnership and Mobilization

Community Partnership and Mobilization			
No.	Item	Weighted Mean	Weight Percent
1	Primary health care institutions possess the necessary data and information to accurately understand the population demographics and geographical characteristics of the area in which they will deliver their services.	2.693	89.78
2	Efforts are currently underway to revise and enhance the data and information.	2.766	92.22
3	The Health Care Centre collaborates with other organizations to identify and incorporate vulnerable demographic groups within its specialized area of operation.	2.026	67.56
4	The health centre establishes the specific geographical region that it will cater to within the community.	2.8	93.33
5	The health centre establishes collaborations with agencies and groups to identify and tackle health problems.	1.993	66.44

6	The health centre assesses the health requirements of the population.	2.446	81.56
7	The Centre frequently revises the needs assessment.	2.493	83.11
Total		2.46	82

Table 7. The Weighted Mean and Percentage Weight are Used to Evaluate the Nurses' Understanding of Health Promotion and Disease Prevention in a Primary Health Care Facility with the Local Council

Local Council of Primary Health Care Centre			
No.	Item	Weighted Mean	Weight Percent
1	The health centre forms a primary health care council, outlining the specific duties and obligations of its members.	2.513	83.78
2	The health care centre comprises community members who serve on a council responsible for primary health care, with clearly defined roles and responsibilities.	2.486	82.89
3	The health centre convenes monthly health care board meetings and disseminates meeting minutes to both health care centre board personnel and higher-level officials.	2.4	80
4	The health care center director engages in community dialogues around health matters.	2.506	83.56
5	The healthcare center actively participates in community engagement through the surveillance, examination, regulation, and communication of infection transmission.	2.806	93.56
6	The Health Care Centre acknowledges its responsibility in participating in regional and local crisis management drills to effectively address emergencies.	2.54	84.67
Total		2.542	84.74

Table 8. The Weighted Mean and Percentage Weight are Used to Evaluate the Nurses' Knowledge Regarding Health Promotion and Disease Prevention in Primary Health Care Centres, Specifically in Relation to Behaviour Change Communication

Behaviour Changes Communications			
No.	Item	Weighted Mean	Weight Percent
1	The behaviour change mission statement demonstrates the healthcare centre's dedication to the behaviour change communication program.	2.226	74.22
2	The Health Care Centre engages in a communication campaign with the aim of transforming societal behaviours into healthy behaviours.	2.44	81.33
3	The health care facility utilizes instructional materials that are presented in a comprehensible way for the behaviour change communication audience, including vulnerable groups, through the use of diverse communication means and media.	2.453	81.78
Total		2.373	79.11

Table 9. The Percentage Weight is Used to Evaluate the Nurses' Proficiency in Health Promotion and Illness Prevention in Primary Health Care Centres

Health Promotion and Disease Prevention			
No.	Item	Weighted Mean	Weight Percent

1	The Primary Health Care Centre is dedicated to disseminating health education and promoting illness prevention through collaboration, pertinent policies, and community engagement.	2.773	92.44
2	The health center is dedicated to developing strategies that effectively promote health and prevent diseases.	2.786	92.89
3	The Health Care Centre actively engages in community health awareness initiatives.	2.84	94.67
4	The health care facility employs educational materials that are tailored to a specific target, including vulnerable groups, utilizing diverse communication methods and media formats.	2.7	90
Total		2.775	92.5

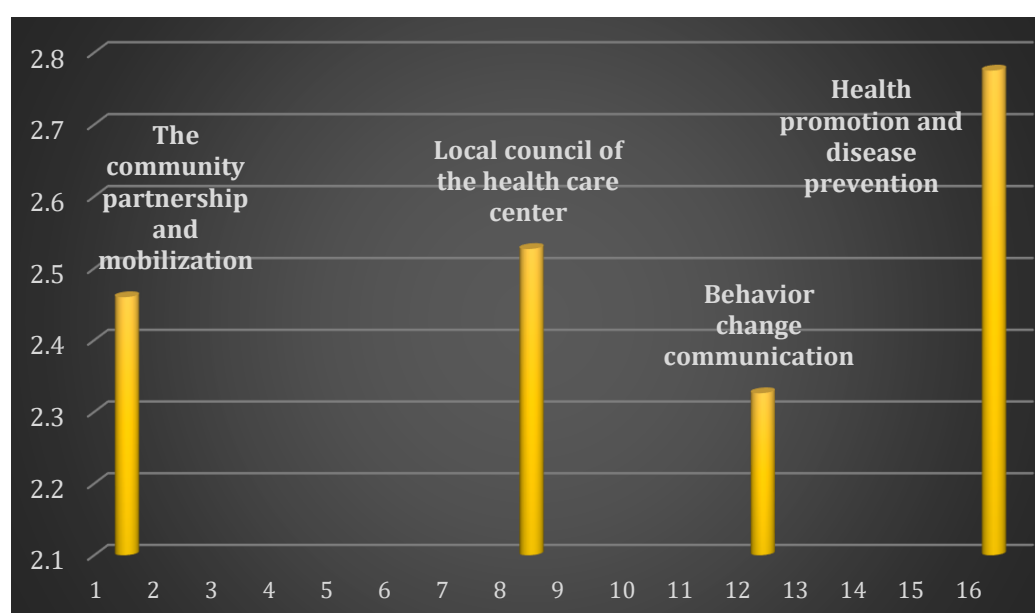


Figure 1. The Illustration Depicts the Four Dimensions of Nurses' Expertise in Health Promotion and Disease Prevention All Paragraphs Must be Indented

4.1. Discussion

Table 1 demonstrates that there were 150 nurses at the primary health care centers analyzed, making up 75% of the total sample size. **Table 2** displays the age distribution of the participants in the study. The age range of 30-39 has the largest percentage (50%), whereas the age range of over 40 has the lowest number (15%). **Table 3** presents the job titles of the study sample. 52% of the sample were nurses who had completed nursing preparatory school. University-specialized nurses accounted for a mere 3.4% of the sample, the smallest share. **Table 4** presents the training courses available in health promotion and illness prevention for the participants in the study. Out of all the participants, 44.6% opted to enroll in the training classes, while the remaining 55.4% chose not to participate. **Table 5** displays the distribution of years of service among the participants in the research. The demographic group that comprises the largest percentage of the sample, making up 52.6%, is in the age range of 10-29 years. Conversely, the category with the smallest percentage, accounting for only 12% of the sample, pertains to persons who have served for more than 30 years. **Table 6** provides data on community partnership and mobilization. The initial paragraph in the chart delineates the precise geographic region that the health center endeavors to cater to, with a percentage of 93.33. The second paragraph indicates that there is now continuous effort to update data and information, with a precise percentage of 92.22. The third paragraph examines the main healthcare resources that are accessible. The data and information necessary for comprehending the population and topography of the area where services will be rendered are acquired at a rate of 89.77. The center updates the needs assessment periodically at a rate of 83.11. The health facility assesses the health

requirements of the community at a rate of 81.555. Through collaboration with other organizations, the health center finds and incorporates vulnerable populations within its specific area of expertise, maintaining a ratio of 67.56. Finally, the health center forms collaborations with agencies and groups to recognize and tackle health requirements, as evidenced by a ratio of 66.44. Table 7 exhibits the main axis of the local council's primary health care center. The initial item indicates that the health care center engages in active collaboration with the community to oversee, evaluate, manage, and communicate information regarding the transmission of infections, achieving a rate of 93.56%. The second entry emphasizes the health care center's comprehension of its role in crisis management drills. The effectiveness of regional and local response to crises is rated as 84.67, indicating a high level of success. The health center achieves effective administration of primary health care through the establishment of a council that precisely delineates duties and responsibilities, attaining a score of 83.78. The health care facility director actively participates in community conversations on health issues, achieving a score of 83.56. The health care center also includes members to improve its operations. The Primary Health Care Council consists of a community with a participation rate of 82.89%. The Health Care Council holds monthly meetings at the health center, during which the minutes are distributed to council staff and higher-ranking officials, with a participation rate of 80%. The initial paragraph was situated in Table 8, which contains the axis of behavior change communication. The health care facility employs customized instructional materials for the behavior change communication program, specifically designed for the target audience, which includes vulnerable populations. They utilize a variety of communication techniques and media in appropriate proportions. The health care center attains a score of 81.78 in the communication initiative aimed at fostering healthy behaviors within the population. In addition, the center's involvement in the program leads to a behavior change rate of 81.33%. Finally, the health care center's mission statement highlights its dedication to the communication program aimed at promoting Modification of behavior, with a precise percentage of 74.22%. Table 9 displays the framework of health promotion and disease prevention. The opening line states that the health care facility actively participates in community health awareness activities, with a participation percentage of 94.67%. The paragraph states that the health center is dedicated to executing tactics that improve health and prevent illness, achieving a rate of 92.89%. The Primary Health Care Center is dedicated to promoting health awareness and preventing diseases through collaboration, appropriate policies, and community involvement, resulting in a success percentage of 92.44%. The final element pertains to a paragraph in which the Health Care Center employs educational materials that are customized for a particular target audience, including disadvantaged populations, and delivered in a concise and comprehensible manner. These resources are conveyed through various communication channels. A variety of media formats from the 1990s. Figure 1 depicts the distribution of percentages for the four axes. The domain of health promotion and illness prevention achieved the highest score, with a percentage of 92.5% and a weighted average of 2.775. The local council of the main health care center got a second-place rating with an excellent percentage of 84.74% and a weighted mean of 2.542. The community partnership and mobilization axis achieved a ranking of third place, scoring 82% and having a weighted average of 2.46. The behavior change communications axis had the lowest rating, with a percentage of 79.111 and a weighted mean of 2.373.

5. CONCLUSION

- The study's findings on demographic characteristics indicated that approximately 50% of the participants had obtained a preparatory nursing degree.
- The research findings revealed that the participants in the study have a remarkable level of knowledge pertaining to health promotion and disease prevention. This discovery demonstrates the significant enthusiasm of health management and health institutions in this essential domain.
- The research findings revealed that nurses' comprehension of the primary health care facility's focal point, as determined by the local council, was ranked second. This underscores the difficulties faced by the staff in effectively engaging with many stakeholders.

- The research findings revealed that nurses' comprehension of the notion of community collaboration and mobilization ranked third. This ranking is ascribed to the difficulties encountered in convincing community participation in health initiatives.
- The research findings revealed that nurses exhibited the least amount of expertise in relation to the behavioral change communication axis. We postulate that this outcome had an adverse effect on the two more sophisticated dimensions. Moreover, the difficulty of modifying societal health behaviors may have played a role in this result.

5.1. Recommendation

- Strengthening training programs in primary health care to specifically target the improvement of communication skills and the promotion of changes in health behavior. In addition, it is crucial to highlight the significance of community involvement and mobilization, along with the establishment of local councils for primary healthcare facilities.
- Retain seasoned nurses and prevent their hasty transfer, while abstaining from substituting them with novice staff. Furthermore, give precedence to the advancement of university and postgraduate nursing programs.
- To prevent overlapping obligations among different nursing jobs, the capability of primary health care institutions will be enhanced by providing work description books specifically designed for distinct nursing categories.
- The research findings revealed that nurses' comprehension of the notion of community collaboration and mobilization ranked third. This ranking is ascribed to the difficulties encountered in convincing community participation in health initiatives.
- The research findings revealed that nurses exhibited the least amount of expertise in relation to the behavioral change communication axis. We postulate that this outcome had an adverse effect on the two more sophisticated dimensions. Moreover, the difficulty of modifying societal health behaviors may have played a role in this result.

Acknowledgments

The authors have no specific acknowledgments to make for this research.

Funding Information

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Haider Kadhum Raddam	✓	✓	✓	✓		✓		✓	✓	✓	✓			
Aqeel Abd Al-Hamza Marhoon	✓	✓	✓		✓	✓	✓			✓	✓	✓		

C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study, and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

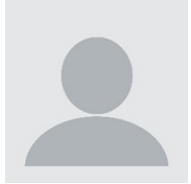
REFERENCES

- [1] M. Wartiningsih, S. Supriyanto, S. Widati, E. Ernawaty, and R. Lestari, 'Health Promoting Hospital: A practical strategy to improve patient loyalty in public sector', J. Public Health Res., vol. 9, no. 2, July 2020. doi.org/10.4081/jphr.2020.1832
- [2] S. Rezaei et al., 'Measurement of quality of educational hospital services by the SERVQUAL model: The Iranian patients' perspective', Electron. Physician, vol. 8, no. 3, pp. 2101-2106, Mar. 2016. doi.org/10.19082/2101
- [3] E. W.-B. (we), 'Health Promotion Glossary of terms 2021', 06-Dec-2021. [Online]. Available: <https://www.who.int/publications/i/item/9789240038349>.
- [4] S. S. Lim et al., 'A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study', Lancet, vol. 380, no. 9859, pp. 2224-2260, 2010.
- [5] R. Beaglehole et al., 'Priority actions for the non-communicable disease crisis', Lancet, vol. 377, no. 9775, pp. 1438-1447, 2011. [doi.org/10.1016/S0140-6736\(11\)60393-0](https://doi.org/10.1016/S0140-6736(11)60393-0)
- [6] S. Yusuf et al., 'Modifiable risk factors, cardiovascular disease, and mortality in 155 722 individuals from 21 high-income, middle-income, and low-income countries (PURE): a prospective cohort study', Lancet, vol. 395, pp. 795-808, 2020. [doi.org/10.1016/S0140-6736\(19\)32008-2](https://doi.org/10.1016/S0140-6736(19)32008-2)
- [7] P. Marques-Vidal, 'Comparison of lifestyle changes and pharmacological treatment on cardiovascular risk factors', Heart, vol. 106, no. 11, pp. 852-862, 2020. doi.org/10.1136/heartjnl-2019-316252
- [8] D. K. Arnett, A. Khera, and R. S. Blumenthal, 'ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease: Part 1, Lifestyle and Behavioral Factors', JAMA Cardiol, vol. 4, no. 10, pp. 1043-1044, 2019. doi.org/10.1001/jamacardio.2019.2604
- [9] T. Kardakis, L. Jerden, M. E. Nystrom, L. Weinehall, and H. Johansson, 'Implementation of clinical practice guidelines on lifestyle interventions in Swedish primary healthcare - a two-year follow up', BMC Health Serv Res, vol. 18, 2018. doi.org/10.1186/s12913-018-3023-z
- [10] Keyworth C, Epton T, Goldthorpe J, Calam R, Armitage CJ. Delivering opportunistic behavior change interventions: a systematic review of systematic reviews. Prev Sci. 2020;21(3):319-31. doi.org/10.1007/s11121-020-01087-6
- [11] World Health Organization. Primary health care: closing the gap between public health and primary care through integration. [https:// www. who. int/ publi catio ns/i/ item/ prima ry- health- care- closi ng- the- gap- betwe enpublic-health- and- prima ry- care- throu gh- integ ration](https://www.who.int/publications/i/item/primary-health-care-closing-the-gap-between-public-health-and-primary-care-through-integration). Accessed 21 Sept 2022.
- [12] L. Rogers, A. De Brun, and E. Mcauliffe, 'Defining and assessing context in healthcare implementation studies: a systematic review', BMC Health Serv Res, vol. 20, no. 1, 2020. doi.org/10.1186/s12913-020-05212-7
- [13] H. L. Colquhoun, J. E. Squires, N. Kolehmainen, C. Fraser, and J. M. Grimshaw, 'Methods for designing interventions to change healthcare professionals' behaviour: a systematic review', Implement Sci, vol. 12, no. 1, 2017. doi.org/10.1186/s13012-017-0560-5
- [14] P. Nilsen, I. Seing, C. Ericsson, S. A. Birken, and K. Schildmeijer, 'Characteristics of successful changes in health care organisations: an interview study with physicians, registered nurses and assistant nurses', BMC Health Serv Res, vol. 20, no. 1, 2020. doi.org/10.1186/s12913-020-4999-8
- [15] Republic of Iraq, Ministry of Health, Annual Report, 2012, P.p.37, 137.

- [16] A. Steptoe and J. Wardle, 'Cognitive predictors of health behavior in contrasting regions of Europe', British Journal of Clinical Psychology, vol. 31, 1992. doi.org/10.1111/j.2044-8260.1992.tb01021.x
- [17] Preventing chronic diseases: a vital investment: WHO global report. 2005.
- [18] G. Carolina, 'World Health Organization (WHO): Declaration: nurses and midwives: a force for health', vol. 57, 2000.
- [19] World Health Organization (WHO): Standards for Health Promotion in Hospitals. 2004.
- [20] D. Whitehead and F. Irvine, 'Developing personal skills: what remains for the future?', Health Promotion International, vol. 26, pp. 245-252, 2011. doi.org/10.1093/heapro/dar072
- [21] 'D: Health promotion in nursing: A deride a discourse analysis', Health Promotion International, vol. 26, pp. 117-127, 2010. doi.org/10.1093/heapro/daq073

How to Cite: Haider Kadhum Raddam, Aqeel Abd Al-Hamza Marhoon. (2024). Evaluation of the nurses' understanding of disease prevention and health promotion in primary health care centres in Al-Diwaniyah. Journal Healthcare Treatment Development (JHTD), 4(2), 1-11. <https://doi.org/10.55529/jhtd.44.1.13>

BIOGRAPHIES OF AUTHORS

	Haider Kadhum Raddam, is an Assistant Lecturer in the Department of Community Health Nursing at the Faculty of Nursing, University of Al-Qadisiyah, located in Al-Diwaniyah, Qadisiyah, Iraq. He is dedicated to advancing nursing education and community health practices within one of Iraq's reputable academic institutions. His academic role reflects a commitment to shaping the next generation of nursing professionals, contributing to the development of community health nursing as a discipline, and supporting healthcare improvement efforts in the Qadisiyah region of Iraq. Email: haider.kadhum@qu.edu.iq
	Aqeel Abd Al-Hamza Marhoon, is an Assistant Lecturer in the Department of Paediatric Nursing at the Faculty of Nursing, University of Al-Qadisiyah, located in Al-Diwaniyah, Qadisiyah, Iraq. He is committed to advancing pediatric nursing education and fostering a deeper understanding of child healthcare among nursing students. Through his academic role at one of Iraq's distinguished nursing faculties, he contributes to shaping competent pediatric nursing professionals and supports the improvement of child health outcomes in the Qadisiyah region and across Iraq.