

Roles of Nursing Skills in Improving Quality of Rehabilitative Health Services for Patients with Chronic Conditions

Mohammed Malih Radhi^{1*}, Haitham Ibrahim Faris²

¹Community Health Nursing, Kut Technical Institute/ Middle Technical University- Iraq.
ORCID: <https://orcid.org/0000-0002-2914-0897>

EM: mohammed.amri92@gmail.com

²Adult Health Nursing/ College of Nursing, Alameed University, Iraq.

EM: haitham.alghazali@alameed.edu.iq

*Corresponding author: Mohammed Malih Radhi (mohammed.amri92@gmail.com)

Received: 20 January 2023

Accepted: 15 April 2023

Citation: Radhi MM, Faris HI (2023) Roles of Nursing Skills in Improving Quality of Rehabilitative Health Services for Patients with Chronic Conditions. History of Medicine 9(1): 831–837. <https://doi.org/10.17720/2409-5834.v9.1.2023.092>

Abstract

Background: The continuous quest to improve the quality of rehabilitative health services comes primarily to focus on controlling chronic diseases and coping with the treatment. The study aimed to investigate the roles of nursing skills in improving quality of rehabilitative health services for patients chronic conditions. **Methods:** This descriptive correlational study included 307 patients with chronic conditions who review specialized centers in Marjan Medical City in Babylon Province. The validity of the study questionnaire was achieved through a experts and reliability was achieved through a pilot study. Data were collected carried out on interview techniques and analyzed by applying the descriptive and deductive approach to statistical data analysis. **Results:** The results of the study indicated that the mean age is 51 (± 9.86), participants were predominated (63.5%), the urban residents (79.2%), elementary and secondary school graduated (31.6%) each them, the employment (63.5). there were correlation coefficients indicate that there is a significant positive correlation between the role of nurses' skills to deal with patients with chronic conditions and the quality of rehabilitative health services as a whole ($r=0.658$; $p=0.000$). **Conclusions:** Nursing skills play a major role in improving the quality of rehabilitative health services, whether through verbal communication, listening, and persuasion. The need to hold training courses for human development on an ongoing basis about the skills of dealing with patients with chronic conditions for nursing workers, whether verbal communication skills, good listening skills and persuasion, because of their impact on the quality of the rehabilitative health service.

Keywords

Roles of Nursing Skills, Quality of Rehabilitative Health Services,

Quality is one of the issues that has received a great deal of attention and privacy by institutions in general, and especially institutions that provide health services 1. Improving the quality of rehabilitation services provided by these institutions achieves benefits for the individual and society 2. The greatest concern is due to the quality of the rehabilitative health service compared to other services, as it is related to the health of the

life-threatening person 3. Interest in the quality of the rehabilitative health service began in the United States of America, through the announcement of the National Program for Quality Improvement, and one of its achievements was the establishment of a commission (specialized centers) to recognize organizations that provide rehabilitative health services 4. The institutions that provide rehabilitative health services have become a

prominent role in the economic life. Their role is no longer limited to providing curative services, but has extended to include preventive aspects, participation in awareness-raising and prevention programs, and all aspects related to the health and safety of society 5, 6. Improving the quality of rehabilitative health services leads to a decrease in costs, an increase in the productivity of the individual and society, and the provision of better services to beneficiaries, and this appears in the form of patient satisfaction and society in general 7.

Interest in dealing with patients has also increased, through communication skills between nurses and patients, as nurses' skills with patients with chronic conditions are among the most important areas of individual and community health 8. Nurses' skills mean the behavior that leads to improving the relationship between the health service provider and the patient, by working to reduce ambiguity and uncertainty in receiving health care, which includes clear and direct communication, which leads to raising the patient's ability to evaluate medical procedures, in addition to ease of access to information or guidance for patients and their families to achieve their interests 9. Skills of dealing with patients require taking the initiative to respect what they say and listen to them, and explain the information to them so that they can understand it in order to achieve high quality in the service provided 10. The role of nurses to deal with chronic conditions is one of the basic and necessary skills in the relationship between nurses-patients as an important element in hospitals in order to achieve the interests of the beneficiaries 11, as the nature of the work of these rehabilitation institutions requires their availability effectively in terms of treatment and rehabilitation 12. Therefore, this study was aimed investigate the roles of nursing skills in improving quality of rehabilitation services for patients chronic conditions.

Patients and Methods

This study relied on the descriptive correlational approach, as it is the most appropriate approach to achieve its objectives. This approach is concerned with determining

the current situation of the problem, then describing, analyzing and interpreting it using statistical analysis, and testing the effect of the independent variable (Roles of Nursing Skills) on the dependent variable (Quality of Rehabilitation Services).

The research sample represents part or a limited number of the total patients with chronic conditions, which were selected from the specialized centers in Marjan Medical City in Babylon Province. The specialized centers included (Diabetic and Endocrinology Center (132 patients), Oncology Center (78 patients) and Digestive System Center (97 patients). A simple random sample of 10% depending on the statistics of the reviewing for the three months prior to the sample collection period from each center was selected using the probability sampling method. The characteristics of the sample included diabetic patients, oncologic patients and patients digestive system diseases.

Field data was collected through a survey list to measure nursing skills to deal with patients, and to measure the quality of rehabilitative health service. It was directed to patients with chronic conditions who benefited from the rehabilitative and curative health service. The survey list included the following sections:

First section: The skills of dealing with patients 24 items, namely (Verbal Communication Skills, Non-verbal Communication Skills, Listening Skills, Persuasion Skills) and measured on 5-point Likert scale (strongly agree, agree, neutral, disagree and strongly disagree), the scale that was approved by Wanjau and colleagues 13.

Second section: Quality of rehabilitative health services 22 items, namely (Responsiveness, Dependability, Sympathy, Materiality, and Assurance) and measured on 5-point Likert scale (strongly agree, agree, neutral, disagree and strongly disagree), the scale that was approved by Grotle and colleagues 14.

Third section: Deals with demographic variables include age, gender and education level.

The face validity of the study tool was conducted after the tool translated into Arabic, which assessed by five experts from faculty of nursing representative (three

professors and two assistant professors). It was carried out on 30 patients, or 10% of the study samples. One of the researchers meets with the participants, introduces themselves, and asks them to participate in the research by giving their feedback on the nursing abilities in patient care and the standard of rehabilitation healthcare services. The researcher then presented the study's goal and title to the participants before asking them to complete an interview-based study sheet in order to gauge how long it would take them to complete it. Each form's expected completion time was 20 minutes. The pilot study's data were examined with no adjustments made, hence it was not eliminated from the sample. The independent variable's Cronbach's alpha was 0.87, and the dependent variable's was 0.93, showing a good level of dependability. Actual data collection took about a two month from September to October 2022. To explain the study's goal and obtain oral agreement, the researchers spoke with each study participant individually. The participants were then questioned by the researchers, who chose from among those who were available for the morning shift on each of the two study days. The data was collected through interviews with patients according to the criteria, which include 1) a patient diagnosed with a chronic disease, and 2) voluntary participation. The study volunteers are not at risk when the research is being used. The appropriate authorities granted official approval for the study to be conducted. Patients who took part in the trial provided oral consent. The participants' privacy and the confidentiality of the data collected were both guaranteed. Study participants are free to refuse or leave the study at any time and are not subject to any restrictions. The IBM SPSS 20.0 program was used for all the analyses that follow. The means, standard deviations, and numbers and percentages (No. and%) were used to categorize the variables. Statistical significance was defined as a two-tailed $p < .05$. To show the link between scores, we used person correlation.

Results

Finding show table (1) , the mean age is 51 (± 9.86), the age 50-59 years old were recorded

the highest percentage (37.1%). In regards with gender, the male participants were predominated (63.5%) as compared with those who are female. In terms of residents, the urban residents (79.2%) were highest than the urban Education level related finding, most of participants were elementary school graduated (31.6%) and secondary school graduated (31.6%). Occupation associated findings, the employment were records highest percentage (63.5) as compared with those who are unemployment. Findings in table (2) indicate that the roles of nursing skills in terms of verbal communication skills ($r=0.391$), listening skills ($r=0.592$) and persuasion skills ($r=0.590$) are predicted variables in improving quality of rehabilitative services. Also the finding show Findings that the roles of nursing skills in terms of verbal communication skills ($r=0.271$) and persuasion skills ($r=0.317$) are predicted variables in improving the responsiveness to the quality of rehabilitative services table (3). The table (4) indicate that the roles of nursing skills in terms of verbal communication skills ($r=0.201$), Listening skills ($r=0.211$) and persuasion skills ($r=0.301$) are predicted variables in improving the dependability on the quality of rehabilitative services. Regarding to Sympathy of Rehabilitative Services and Roles of Nursing Skills Findings indicate that the roles of nursing skills in terms of verbal communication skills ($r=0.421$), Listening skills ($r=0.302$) and persuasion skills ($r=0.313$) are predicted variables in improving the sympathy in the quality of rehabilitative services table (5). About Materiality of Rehabilitative Services and Roles of Nursing Skills Findings indicate that the roles of nursing skills in terms of verbal communication skills ($r=0.190$) and non-verbal communication skills ($r=0.279$) are predicted variables in improving the materiality of the quality of rehabilitative services table (6). While the results regarding Assurance of Rehabilitative Services and Roles of Nursing Skills indicate that the roles of nursing skills in terms of verbal communication skills ($r=0.521$), non-verbal communication skills ($r=0.197$), listening skills ($r=0.212$) and persuasion skills ($r=0.357$) are predicted variables in improving the

assurance of the quality of rehabilitative services table (7).

Table (1): Sociodemographic Characteristics SDVs

SDVs	Classification	No. (%)
Age (M± SD=51±9.68)	30-39	48 (15.6)
	40-49	64 (20.8)
	50-59	114 (37.1)
	≥60	81 (26.4)
Gender	Male	195 (63.5)
	Female	112 (36.5)
Residents	Urban	243 (79.2)
	Rural	64 (20.8)
Education level	Not read and write	16 (5.2)
	Read and write	16 (5.2)
	Elementary	97 (31.6)
	Secondary school	97 (31.6)
	College	81 (26.4)
Occupation	Employ	195 (63.5)
	Unemployment	112 (36.5)

Table (2): Correlation between Quality of Rehabilitative Services and Roles of Nursing Skills

Person's Correlation Coefficient	1	2	3	4	5	6
1.Quality of rehabilitative services		.391**	.024	.592**	.590**	.658**
2.Verbal communication	.391**		.088	.123	.114	.122*
3.Non-verbal communication	.024	.088		.060	-.059	.024
4.Listening skills	.592**	.123	.060		.031	.201*
5.Persuasion skills	.590**	.114	-.059	.031		.305*
6.Overall Nursing Skills	.658**	.122*	.024	.201*	.305*	

Table (3): Responsiveness of Rehabilitative Services and Roles of Nursing Skills

Person's Correlation Coefficient	1	2	3	4	5
1.Responsiveness of rehabilitative services		.271**	.024	.071	.317**
2.Verbal communication	.271**		.108	.027	.015
3.Non-verbal communication	.024	.108		.012	.110
4.Listening skills	.071	.027	.012		.021
5.Persuasion skills	.317**	.015	.110	.021	

Table (4): Dependability of Rehabilitative Services and Roles of Nursing Skills

Person's Correlation Coefficient	1	2	3	4	5
1.Dependability of rehabilitative services		.201*	.024	.071	.317**
2.Verbal communication	.201*		.108	.027	.015
3.Non-verbal communication	.008	.108		.012	.110
4.Listening skills	.211**	.027	.012		.021
5.Persuasion skills	.301**	.015	.110	.021	

Table (5): Sympathy of Rehabilitative Services and Roles of Nursing Skills

Person's Correlation Coefficient	1	2	3	4	5
1.Sympathy of rehabilitative services		.421**	.024	.071	.317**
2.Verbal communication	.421**		.108	.027	.015
3.Non-verbal communication	.011	.108		.012	.110
4.Listening skills	.302**	.027	.012		.021
5.Persuasion skills	.313**	.015	.110	.021	

Table (6): Materiality of Rehabilitative Services and Roles of Nursing Skills

Person's Correlation Coefficient	1	2	3	4	5
1.Materiality of rehabilitative services		.190*	.279	.002	.012
2.Verbal communication	.190*		.108	.027	.015
3.Non-verbal communication	.279*	.108		.012	.110
4.Listening skills	.002	.027	.012		.021
5.Persuasion skills	.012	.015	.110	.021	

Table (7): Assurance of Rehabilitative Services and Roles of Nursing Skills

Person's Correlation Coefficient	1	2	3	4	5
1.Assurance of rehabilitative services		.521**	.197*	.212**	.357**
2.Verbal communication	.521**		.108	.027	.015
3.Non-verbal communication	.197*	.108		.012	.110
4.Listening skills	.212**	.027	.012		.021
5.Persuasion skills	.357**	.015	.110	.021	

Discussion

It is clear from the findings that the correlation coefficients indicate that there is a significant positive correlation between the role of nurses' skills to deal with patients with chronic conditions and the quality of rehabilitative health services as a whole, that is, the result is that the beneficiaries are aware of the skills of dealing with them. All dimensions of nursing skills (except for non-verbal communication) affect the quality of the rehabilitation health service in the specialized centers under study. This result means that the higher the skills of the nursing staff in dealing with patients with chronic conditions (verbal communication, listening, and persuasion), the higher the quality of the rehabilitative health service, and this result is consistent with the study of both Gutenbrunner et al. 11 and Clarke et al. 12. The researcher believes that verbal communication skills are the most influential in the level of quality of the rehabilitative health service. This may be due to the large number of patients who frequent specialized centers, and they are more affected by the level of verbal communication, and that their awareness of non-verbal communication may not be effective. Therefore, the skill of listening and persuasion came in the following ranks, which emphasizes the importance of verbal communication, as this communication needs listening to understand the needs of patients, then focus on persuasion, treatment and giving instructions, which are the skills that illustrate the importance of verbal communication skill in influencing the level of quality of rehabilitative health service in the centers under study.

The results of the study showed that the nurses' skills to deal with patients in the responsiveness dimension of the rehabilitative health services, where it was found that the dimensions of the skills of dealing with patients (verbal communication and persuasion) have a positive effect on the responsiveness dimension. However, dimensions of non-verbal communication and listening, there was no positive effect on the quality of rehabilitation services. This result means that the more the nurses have the skills

of verbal communication with patients and the skills of persuasion treatment its adherence, the higher the quality of rehabilitative services in those institutions. The researchers believe that this result confirms the precedent, as the effect remains verbal communication and the strongest persuasion in the responsiveness dimension as one of the dimensions of the quality of the rehabilitative health service, while non-verbal communication did not show a significant effect on the responsiveness dimension, and this confirms the researchers' point of view that the nature of the large number of patients who frequently hesitate make them more affected by verbal communication skill much more than verbal non-verbal communication skill.

The nursing skills to deal with patients on the dependability dimension, which is one of the dimensions of the quality of rehabilitation services, as all nursing skills (except for the non-verbal communication dimension) have a positive impact on the reliability dimension, which is verbal communication, listening, and then persuasion. This result means that the skills of verbal communication, listening and persuasion that are available in the nurses play a positive role in improving the quality of rehabilitative service in the specialized centers. This result confirms that non-verbal communication does not affect the quality of rehabilitation services, as well as the dependability dimension.

The nursing skills to deal with patients on the dimension of empathy, which is one of the dimensions of the quality of rehabilitative services, as all the dimensions of dealing skills except non-verbal communication have a positive impact on empathy in the quality of rehabilitative services, namely (non-verbal communication, then persuasion and finally listening). This result means that the more the nurses have the skills of verbal communication, listening and persuasion, the higher the quality of the rehabilitative service, and this is consistent with Arnold 16. This also means that the skill of non-verbal communication as one of the skills of dealing with patients does not have a significant effect on the dimensions of responsiveness, dependability and empathy from the dimensions of the quality of the rehabilitative

health service.

The nursing skills to deal with patients on the materiality dimension, which is one of the dimensions of the quality of rehabilitative services, as the dimensions of dealing skills (verbal and non-verbal communication) have a positive impact on the materiality aspects of the quality of rehabilitative services. This result means that the more the nurses have the skills of verbal and non-violent communication, the higher the quality of the rehabilitative service.

The nursing skills for dealing with patients are on the assurance dimension, which is one of the dimensions of the quality of rehabilitative services, as all dimensions of dealing skills (verbal and non-verbal communication, listening and persuasion) have a positive impact on the assurance in the quality of rehabilitative services. This result means the more nurses have these skills, the higher the quality of rehabilitative service, and this findings agree with Brzoska et al.17, Lynch et al. 18, Frier et al. 19 and Juma Elywy et al. 20.

These results, in general, showed that the nurses' reliance on non-verbal communication at the expense of the verbal communication may leave a negative impression on patients with chronic conditions, meaning that non-verbal communication should be a complement to verbal communication and not a substitute for it, and that good listening to patients and understanding their needs, and relying on Persuasion in dealing with patients in the stages of treatment and adherence to it increases the quality of rehabilitative health services.

Conclusion

Nursing skills play a major role in improving the quality of rehabilitative health services, whether through verbal communication, listening, and persuasion. The need to hold training courses for human development on an ongoing basis about the skills of dealing with patients with chronic conditions for nursing workers, whether verbal communication skills, good listening skills and persuasion, because of their impact on the quality of the rehabilitative health service.

Acknowledgement

Researcher appreciate the cooperation of each

and every study participant.

Disclaimer

The ethics committees of Middle Technical University reviewed and approved. It was carried out in accordance with the ethical principles specified in the 1964 Declaration of Helsinki and any subsequent changes. This work received funding from the Research Center. The authors would like to take this chance to express their gratitude to everyone who helped with this research.

Conflict of interest: None

Funding disclosure: None

References

- Alfano CM, Cheville AL, Mustian K. Developing high-quality cancer rehabilitation programs: a timely need. *American Society of Clinical Oncology Educational Book*. 2016 May;36:241-9.
- Holland AE, Cox NS, Houchen-Wolloff L, Rochester CL, Garvey C, ZuWallack R, Nici L, Limberg T, Lareau SC, Yawn BP, Galwicki M. Defining modern pulmonary rehabilitation. An official American thoracic Society workshop report. *Annals of the American Thoracic Society*. 2021 May;18(5):e12-29.
- Grumi S, Provenzi L, Gardani A, Aramini V, Dargenio E, Naboni C, Vacchini V, Borgatti R, Engaging with Families through On-line Rehabilitation for Children during the Emergency (EnFORCE) Group. Rehabilitation services lockdown during the COVID-19 emergency: the mental health response of caregivers of children with neurodevelopmental disabilities. *Disability and Rehabilitation*. 2021 Jan 2;43(1):27-32.
- Sand-Svartrud AL, Berdal G, Azimi M, Bui I, Dager TN, Eppeland SG, Fredheim GO, Hagland AS, Klokkeide E, Linge AD, Sexton J. Associations between quality of health care and clinical outcomes in patients with rheumatic and musculoskeletal diseases: a rehabilitation cohort study. *BMC Musculoskeletal Disorders*. 2022 Dec;23(1):1-4.
- Hill H, Killaspy H, Ramachandran P, Ng RM, Bulman N, Harvey C. A structured review of psychiatric rehabilitation for individuals living with severe mental illness within three regions of the Asia-Pacific: implications for practice and policy. *Asia-*

- Pacific Psychiatry. 2019 Jun;11(2):e12349.
- Morris LD, Grimmer KA, Twizeyemariya A, Coetzee M, Leibbrandt DC, Louw QA. Health system challenges affecting rehabilitation services in South Africa. *Disability and Rehabilitation*. 2021 Mar 12;43(6):877-83.
- Altan F, Ekiyor A, Unalan D. Health Services Delivery and Satisfaction. In *Quality Management for Competitive Advantage in Global Markets 2021* (pp. 95-108). IGI Global.
- Cramm JM, Nieboer AP. Self-management abilities and quality of life among frail community-dwelling individuals: the role of community nurses in the Netherlands. *Health & Social Care in the Community*. 2017 Mar;25(2):394-401.
- Nightingale S, Spiby H, Sheen K, Slade P. The impact of emotional intelligence in health care professionals on caring behaviour towards patients in clinical and long-term care settings: Findings from an integrative review. *International journal of nursing studies*. 2018 Apr 1;80:106-17.
- Verhofstadt M, Van Assche K, Sterckx S, Audenaert K, Chambaere K. Psychiatric patients requesting euthanasia: guidelines for sound clinical and ethical decision making. *International Journal of Law and Psychiatry*. 2019 May 1;64:150-61.
- Gutenbrunner C, Stievano A, Nugraha B, Stewart D, Catton H. Nursing—a core element of rehabilitation. *International Nursing Review*. 2022 Mar;69(1):13-9.
- Salmond SW, Echevarria M. Healthcare transformation and changing roles for nursing. *Orthopedic nursing*. 2017 Jan;36(1):12.
- Wanjau KN, Muiruri BW, Ayodo E. Factors affecting provision of service quality in the public health sector: A case of Kenyatta national hospital, 2012.
- Grotle M, Garratt A, Luchting I, Kjekken I, Klokkerud M, Uhlig T, Hagen KB. Development of the rehabilitation patient experiences questionnaire: data quality, reliability and validity in patients with rheumatic diseases. *Journal of rehabilitation medicine*. 2009 Jun 1;41(7):576-81.
- Clarke JL, Bourn S, Skoufalos A, Beck EH, Castillo DJ. An innovative approach to health care delivery for patients with chronic conditions. *Population health management*. 2017 Feb 1;20(1):23-30.
- Arnold EC, Boggs KU. *Interpersonal relationships e-book: professional communication skills for nurses*. Elsevier Health Sciences; 2019 Feb 2.
- Brzoska P, Sauzet O, Yilmaz-Aslan Y, Widera T, Razum O. Satisfaction with rehabilitative health care services among German and non-German nationals residing in Germany: a cross-sectional study. *BMJ open*. 2017 Aug 1;7(8):e015520.
- Lynch EA, Cadilhac DA, Luker JA, Hillier SL. Inequities in access to inpatient rehabilitation after stroke: an international scoping review. *Topics in stroke rehabilitation*. 2017 Nov 17;24(8):619-26.
- Frier A, Barnett F, Devine S, Barker R. Understanding disability and the ‘social determinants of health’: how does disability affect peoples’ social determinants of health?. *Disability and rehabilitation*. 2018 Feb 27;40(5):538-47.
- Juma Elywy G, Radhi MM, Khyoosh Al-Eqabi QA. Social Support and Its Association With the Quality of Life (QoL) of Amputees. *Iranian Rehabilitation Journal*. 2022 Jun 10;20(2):253-60.