

RESEARCH TITLE

**TELENURSING NURSING HOMES IN PROVIDING
RAPID TREATMENT SERVICES**

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Abstract

telenursing is a developing and advancing concept , we try to study it to show at which level we had reached demonstrate the importance telenursing in management of Common diseases and reduce the cost for patient , Design of a descriptive cross-sectional study conducted in the College of Nursing (100) nursing students (males and females). from first of January 2024 to last January , 2024 for the purpose of studying the knowledge of nursing students about the management of common diseases by Telenursing in Basra. A standard 2-point Likert scale including: yes or no was used for the purpose of the study. The already completed questionnaire format was distributed to 100 nursing students, our study showed that 32% were males and 78% were females . 70% were at age interval (18-25) , 18% at age interval (25-35) and 12% at age interval 35 and above .80% were single and 20% married , 74% Of the sample were living in center of basra and 26% living in the countryside. 20% were second stage ,30 % third stage and 50% fourth stage , Who were forming 60% morning study and 40% evening study , The student economic status was 70% very good ,25% was middle and 5% was weak ,70% were dose not work , 16% were work in health and 14% were dose not work , it was the best way to communication with hospital form 64% of social media , 25% via the phone and 11% web applications.

Key Words: telenursing ,nursing homes, providing rapid, treatment services.

Introduction :

The World Health Organization (WHO,2016) defines telenursing as "the delivery of health care services over long distances between patients and providers [1] . telenursing is the practice of using technology to provide nursing care and carry out nursing work [2] . The COVID-19 pandemic has created a number of difficulties, including a rise in the number of patients and the possibility that the disease may spread throughout the world's telenursing systems, particularly nursing. Technology has the potential to aid nursing in these situations [3] .and due increase treatment expenses, and nurse workload have all grown as a result of a high patient volume and referral rate [4] .Moreover there Patients are at home and do not have access to certain services in health care are given the required care using in-absentia methods like remote care via technology [3]. Nurses can continue care and provide ongoing care services by using available technologies such as mobile phones, computers, and existing communication apps such as Instagram, WhatsApp, and Telegram [5] .In this research, we deal with many problems in the community of basra because increase cost treatment and difficult get access for patients to quality, cost-effective, health services wherever they may be. It is particularly valuable for those in remote areas, vulnerable groups, and aging populations. For that the aim of this research demonstrate the importance telenursing in management of Common diseases and reduce the cost for patient The easiest way, lowest costs and fastest , The most common diseases in the visual community will be studied and researched, which through technology can provide remote consultations in nursing .

telenursing, also referred to as telephone advice nursing or professional telenursing nursing, is defined as providing all nursing services via phone [6]. Registered Nurses assess various health conditions and offer verbal assistance, direction, and recommendations in healthcare issues [7]. Telenursing is available worldwide despite research being more prevalent in developed nations [8]. Satisfaction is a sought-after result in healthcare and is considered a measure of care quality in telenursing, important for adherence [9 ,10]. Research on best practices for tele nurses is scarce, despite the telephone being a longstanding tool in health care delivery [11,12].

partly due to a lack of appropriate outcome instruments [13] ,In today's information age, individuals can access information and knowledge easily, which has led to changes in cultural, educational, and health-related needs. These changes increasingly require people's needs to be met without conception of time and place, which also affects health systems and has led to the creation of new service areas, such as telenursing and telemedicine [14] . Increasing the amount of data generated by numerous applications and day-to-day operations in society has forged the need to alter, refine and produce data management and treatment approaches and models that account for database and computer system limitations. Big Data emerges in reaction to this, a concept that incorporates multiple techniques involved with handling vast volumes of data from diverse sources and is easily generated [34] .

Important of study :

There is a great importance and a positive impact telenursing in management of Common diseases and reduce the cost for patient

Problem of study :

Because of the increasing number of patients at the moment due to the move away from good healthy food and because of the increasing epidemics and sometimes because of the lack of staff and lack of experience, especially in rural areas, it was necessary to have an alternative that saves the patient, even temporarily, until the patient arrives at the hospital if the condition requires transportation to the hospital and to save many lives, and also because of the costs borne by the patient .

The aim of study :

The aim of Research to demonstrate the importance telenursing in management of Common diseases and reduce the cost for patient , Research Hypothesis There is a great importance and a positive impact telenursing in management of Common diseases and reduce the cost for patient.

Principles of telenursing :

- 1-Augment existing telenursing services.
- 2 -Enhance optimum access and, where appropriate and necessary, provide immediate access to healthcare services.
- 3- Follow position descriptions that clearly define comprehensive, yet flexible roles and responsibilities.
- 4- Improve and/or enhance the quality of care.
- 5- Reduce the delivery of unnecessary health services.
- 6- Protect the confidentiality/privacy and security of information related to nurse-client interactions [15] .

Qualifications and skills of telenursing

In general, the competencies required in telenursing practice mirror the competencies required of all registered nurses (e.g., clinical competence and assessment skills in the nurses' area of practice; an understanding of the scope of service being provided). However, registered nurses practicing telenursing should also possess :

- 1-personal characteristics (e.g, positive attitude ,open mindedness towards technology and good people skills) that will facilitate their involvement and advance the telenursing program [16] .
- 2-knowledge and ability to navigate the technology system and environment (e.g., the knowledge and skill to properly operate hand-held cameras, videoconferencing equipment, computers, etc.)
- 3-an understanding of the limitations of the technology being used(e.g. able to determine if vital signs are being monitored accurately by specific equipment) .
- 4-the ability to recognize when telenursing approaches are not appropriate for a client's needs (i.e., not 'reasonably' equivalent to any other type of care that can be delivered to the client, considering the specific context, location and timing, and relative availability of traditional care), includes assessment of a client's level of comfort with telenursing [17] .
- 5-ability to modify clients care plans based on above noted assessments[18] .
- 6-awareness of client risks associated with telenursing and willingness to develop back-up plans and safeguards [19] .
- 7-knowledge, understanding and application of telenursing operational protocols and procedures .
- 8-competent enhanced communication skills .
- 9-appropriate video/telephone behaviors .
- 10-awareness of the evidence base for their practice and areas of practice in need of research.
- 11-the ability to deliver competent nursing services by regularly assessing their own .
- 12-competence, identifying areas for learning, and addressing knowledge gaps in relation to the area of practice and relevant decision-based software and technology [20] .

Advantage of Telenursing

Advantages of telenursing There are those who suggest that telenursing is not a specialty, in fact, it is the use of technology to deliver health care [21]. telehealth can involve a number of technologies ranging from sophisticated cameras and video display at two or more sites providing live, real-time interaction, to the "plain old telephone system," or POTS. The potential benefits of telenursing include but are not limited to:

- 1- contacting patients at home, work, or school
- 2- convening "distributed" health team conferences, including patients
- 3- assessing and developing a plan of care for patients in remote areas
- 4- providing follow-up to previous plans of care and interventions
- 5- peer conferences
- 6- the opportunity to consult with other nurses, particularly nurses in remote areas who may be clinical experts or those needing to contact nurses who are experts
- 7- accessing expanded research populations
- 8- collecting data from remote sites Thus, nurses can provide "direct" care for patients in remote or satellite areas with the use of sophisticated equipment or use the POTS with existing equipment. For example, nurses in transplant or dialysis outpatient settings may be using some form of telenursing, while other new roles evolve such as nurse case managers in managed care settings.

Disadvantage of Telenursing

One of the significant impediments of utilizing telehealth from patient's viewpoint is patient confidentiality. Persistent privacy and the security of private data must be defended, paying little heed to the gathering system used to concentrate data. Security and security is a paramount thought in telenursing, and patients and experts must both feel guaranteed that data is gathered and put away securely [22].

1- telenursing faces electronic glitches. Engineering is just as solid as the electrical current that keeps it running. Severe climate and different disturbances can result in a force blackout or disturb a web association, muddling online discussion with a specialist. Workers ought to remember that preceding planning online visits .

2- telenursing faces the issue of inadequate assessment. While being able to interface with your essential forethought doctor or dental specialist is a real additionally, certain non-verbal prompts may at present sneak past the cracks. According to [23] , there are no restrictions on how you can utilize telenursing, obviously one of the cons is you cannot generally touch or feel the patient .

3-The majority of the more seasoned patients have an issue with worthiness of this new engineering. telehealth could be a hard pill to swallow for more seasoned patients who have been unused to machines and innovation as a sidekick to information and practice. As opposed to feeling that they are, no doubt "supplanted" by machines, these experts ought to be swayed to view telehealth and telecom as a subordinate to expert practice [24].

Studies have demonstrated that most patients are extremely tolerating of telenursing, yet a few experts have been slower to grasp this innovation. Nevertheless, telehealth is here to stay and will just develop, and experts **who** grasp new engineering will find that their heap is lightened, and their patients are healthier and more fulfilled by their care.

4- telenursing faces the issue of physical resistance. The majority of resistance originates

from specialists attempting to agreeably utilize the new engineering, yet this reluctance just expands as such, [25] . “In the meantime, their interest has been settled when they think about on the different ways they may begin to use this technology to manage the patients who have chronic deceases. Disadvantage of Telenursing

Study design:

Design of a descriptive cross-sectional study conducted in the College of Nursing (100) nursing students (males and females). At the University of Basra (Bab Al-Zubair campus) from first of January 2024 to last January , 2024 for the purpose of studying the knowledge of nursing students about the management of common diseases by Tele nursing in Basra.

Setting of project :

The present study carried out in the College of Nursing (Bab Al-Zubair campus - University of Basra) .

Sample of Study :

A convenient sample consisting of 100 nursing students for the morning study in the College of Nursing, University of Basra.

Project instruments :

A closed end - question questionnaire was used for the purpose of data collection. The questionnaire contains two parts. The first part contains the student's personal information, which includes age, gender, residence, educational stage, financial and marital status, as well as the student's work if he works. The second part contains questions about students' knowledge about tele-nursing, which consists of 30 questions.

A standard 2-point Likert scale including: yes or no was used for the purpose of the study. The already completed questionnaire format was distributed to 100 nursing students, where they read the format and answered it, then the format was collected by the researchers, and each format was scored according to the right typical answer.

Statistical data analysis :

Descriptive and inferential Data Analysis

1- Frequencies

2- Percentage (%)

3-mean of scores

4. Score grading; by using the traditional method of calculating grades using (100 %) as measure for scoring

A. Poor grade less than 50%

B. Accepted grade from 50 to 59%

C. Intermediate grade 60 to 69%

D. Good grade 70 to 79%

E. Very good 80 to 89%

F. Excellent 90% and more

5- the significant association between scoring and demographic features were studied using Pearson correlation

Results :

Table 4-1 Distribution of the Variables Related Demographic Characteristic N=100 Nursing students.

Table 4-1 :descriptive statistics of demographic variables			
Demographic Variables	Variables Classes	Frequency	Percent
Age	18-25	80	80%
	25-35	12	12%
	35 and above	8	8%
Gender	Male	28	28%
	Female	72	72%
Address	Center	69	69%
	Countryside	29	29%
	Others	2	2%
Stage of study	Second	5	5%
	Third	18	18%
	Fourth	77	77%
Type of study	Morning	68	68%
	Evening	32	32%
Economic status	Weak	5	5%
	Middle	68	68%
	Good	27	27%
Marital status	Single	81	81%
	Married	15	15%
	Other	4	4%
Employment	Field of health	16	16%
	Other field	17	17%
	Don't work	67	67%
Means of Communication	Social media	63	63%
	Web application	12	12%
	The phone	25	25%
	Total	100	100%

The table showed the demographic features for the studied sample

32% were males and 78% were females . 70% were at age interval (18-25) , 18% at age interval (25-35) and 12% at age interval 35 and above .80% were single and 20% married , 74% Of the sample were living in center of basra and 26% living in the countryside. 20% were second stage ,30 % third stage and 50% fourth stage , Who were forming 60% morning study and 40% evening study , The student economic status was 70% very good ,25% was middle and 5% was weak ,70% were dose not work , 16% were work in health and 14% were dose not work , it was the best way to communication with hospital form 64% of social media , 25% via the phone and 11% web applications .

Table 4-2 the distribution of the study sample according to the questionnaire answer and the result of mean of scores for each question

Item	N	Answer			MS	Level	Significance
		Yes	Neutral	No			
Q1	100	54	24	22	2.32	Fair	S
Q2	100	35	17	48	1.52	Poor	NS
Q3	100	48	22	30	2.08	Fair	S
Q4	100	16	23	61	1.55	poor	NS
Q5	100	48	26	26	2.22	Fair	S
Q6	100	21	32	47	1.74	Fair	NS
Q7	100	46	36	18	2.28	Fair	S
Q8	100	58	25	17	2.41	Good	S
Q9	100	73	18	9	2.64	Good	S
Q10	100	50	31	19	2.31	Fair	S
Q11	100	53	27	20	2.23	Fair	S
Q12	100	45	30	25	2.20	Fair	S
Q13	100	74	17	9	2.65	Good	S
Q14	100	67	19	14	2.53	Good	S
Q15	100	68	21	11	2.57	Good	S
Q16	100	53	33	14	2.39	Good	S
Q17	100	67	18	15	2.52	Good	S
Q18	100	38	31	31	2.07	Fair	S
Q19	100	26	29	45	1.71	Fair	NS
Q20	100	38	40	22	2.18	Fair	S
Q21	100	56	25	19	2.43	Good	S
Q22	100	47	33	20	2.27	Fair	S
Q23	100	59	24	17	2.42	Good	S
Q24	100	54	32	14	2.40	Good	S
Q25	100	47	33	20	2.17	Fair	S
Q26	100	58	28	14	2.44	Good	S
Q27	100	44	28	14	2.12	Fair	S
Q28	100	52	32	16	2.36	Good	S
Q29	100	56	25	19	2.37	Good	S
Q30	100	32	52	16	2.16	Fair	S
Grand Mean score					2.24	Fair	S

The table showed the distribution of the study sample according to the questionnaire answer and the result of mean of scores for each question, the overall results was fair and the overall association was significant .

also our students did not have previous experience in telenursing , and they did not agree with that telenursing gives better results than examination in health centers.

And they did not agree with that possible to use telehealth in diagnosing diseases, especially skin diseases, through pictures

they did not agree with that undergraduate nursing students receive appropriate education in telehealth care for patients

Table 4-3 distribution of the sample according to score answer

Score interval	Grade	Frequencies	Percentages
Less than50	Poor	31	31%
50-59	Accepted	18	18%
60-69	Intermediate	15	15%
70-79	Good	19	19%
80-89	Very good	12	12%
90 and above	Excellent	5	5%
Total		100	100%

The table showed distribution of the sample according to score answer , 31% had poor scores , 18% had accepted scores , 15% had middle level scores , 19% had good scores and 5% had excellent scores . so the overall knowledge would be 69% (summation of scores from 50 and above) .

Table4-4 the correlation between age and scores

Correlation		Age	Scores
Age	Pearson Correlation	1	-.052
	Sig. (2-tailed)		.608
	N	101	100
Scores	Pearson Correlation	-.052	1
	Sig. (2-tailed)	.608	
	N	100	100

The table showed the correlation of age intervals with scores , where there was no significant association between them .In deed we examine the correlations of scores with each demographic variable but unfortunately we found all were negative.

Discussion:

In our study we try to study the knowledge of the students about telenursing , and we found the they were had fair knowledge, and there was no significant association between knowledge and the demographic features of the study sample .also our students did not have previous experience in telenursing , and they did not agree with that telenursing gives better results than examination in health centers.

And they did not agree with that possible to use telenursing in diagnosing diseases, especially skin diseases, through pictures

they did not agree with that undergraduate nursing students receive appropriate education in telenursing care for patients , so we can understand that our students had positive behavior toward telenursing

In Poland study *telenursing was recognized properly by (75%) respondents* , while in our study only 54% [25] .

Also in Poland study Students from a few universities showed significantly higher willingness to introduce telenursing classes into nursing curriculum and the intention to use telenursing services in their future nursing practice , this was differ from our study we were had only 16 % who will to add telenursing to the curriculum [25].

A study done on Nigeria they found that Majority (54.8%) had not heard about telehealth which is similar to our study [26].

Conclusion:

- 1-most of our sample was females
- 2-the students had fair knowledge in telenursing
- 3-there was no statistical relationship between students knowledge about telenursing and their demographic features

Recommendation:

- 1-expand the knowledge of the students about telenursing
- 2-introduce the subject of telenursing in the curriculum of the nursing college

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