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A Descriptive Study to Assess the Level of Knowledge About Telemedicine Among Students Studying in Royal Global University, Guwahati, Assam

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ABSTRACT

Telemedicine is the exchange of medical information from one location to another using electronic communication, which improves patient health status. Telemedicine has multiple applications and can be used for different services, which includes wireless tools, email, two-way video, smart phones and other methods of telecommunications technology. . Recent advancements in medical technology have resulted in telemedicine applications ranging from telephone triage and outpatient e-Visits to mental health, postoperative follow-ups, and specialized counseling. Because patients and providers become accustomed to these virtual connections during the epidemic, many will likely continue to use telemedicine in the future.

Aim: to assess the level of knowledge and to find out the association between knowledge with socio-demographic variables among students of Royal Global University Guwahati.

Methods and materials: a descriptive study was used to accomplish the objectives. Study was undertaken among 100 students by using random sampling method. Structured questionnaire was used to assess students knowledge about telemedicine.

Results: Out of 100 students, majority 95(95%) have moderately adequate knowledge, 4(4%) have adequate knowledge and 1(1%) have inadequate knowledge. There is no significant association between knowledge with socio-demographic variables at 0.05 level.

Conclusion: The study revealed that knowledge among students was moderate but there is need to improve the knowledge level among students.

Keywords: knowledge, telemedicines, students

INTRODUCTION

Telemedicine is the exchange of medical information from one location to another using electronic communication, which improves patient health status. “Tele” is a Greek word meaning “distance” and “menderi” is a Latin word meaning “to heal”. Telemedicine is one field which was successful in invoking a keen interest in the private sector and making them take an active part in public health management. Some of the current major Indian private sector players in telemedicine include Naryana

Hrudayalaya, Apollo Telemedicine Enterprises, Asia Heart Foundation, Escorts Heart Institute, Amrita Institute of Medical Sciences and Aravind Eye Care.

OBJECTIVES

1. To assess the level of knowledge regarding telemedicine among students of Royal Global University, Guwahati, Assam.
2. To find out the association between knowledge regarding telemedicine with selected socio-demographic variable among students of Royal Global University.

REVIEW OF LITERATURE

- P.S.Mahalaxmi, B.P.Nagapati, P.Preethishree, A.Prabhakar(2020) conducted a cross sectional study on Knowledge, attitude and practices of telemedicine among 96 health-care practitioners during COVID pandemic, in Yenepoya Medical College, Mangalore. Snowball technique was used and questionnaire form was circulated via whatsapp and e-mail. Descriptive statistical method was applied. The result showed that 63.5% of healthcare practitioners were aware of the term telemedicine, 22.9% were aware but not practicing and 13.5% were aware and currently practicing telemedicine.
- Swed S, Bohsas H, et.al (2022) conducted a cross-sectional study on awareness, knowledge, attitude and skills regarding telemedicine among 385 Syrian healthcare providers during the COVID-19 pandemic. The study depicts that, 52.72% of them were females, 83.9% of them were aged less than 30 years old, and 66% were working in the governmental sector. 66% of participants have moderate knowledge about using computers and the internet, 80% have heard about telemedicine.

RESEARCH METHODOLODY

Research approach : quantitative approach
Research Design: descriptive design
Variables:
Research variable: knowledge on telemedicine
Demographic variables: age, gender, religion, year of study, source of information

SETTING OF THE STUDY: Royal Global University, Guwahati

POPULATION: students

SAMPLE SIZE: 100

SAMPLING TECHNIQUE: Random sampling technique

CRITERIA FOR SAMPLING SELECTION

Inclusion criteria:

1. The students who were present during the study.
2. The students who were willing to participate in the study.

Tools and technique: Self -Structured questionnaire was used to assess the knowledge and self report technique was used to gather the data.

CONTENT VALIDITY OF THE TOOL

The structured questionnaire was prepared by the researcher and was validated by 4 experts. The prepared instrument along with the problem statement and objective was submitted to 4 experts in the field of Medical Surgical Nursing.

RELIABITY OF THE TOOL

The reliability of the tool was obtained by using split half method and found to be 0.74

ETHICAL CONSIDERATION

- Permission was taken from the Principal of Royal School of Nursing for conducting the study.
- Administrative permission was obtained from the Registrar .
- Verbal and written consent was obtained from the participants of the

PILOT STUDY

The pilot study was conducted on 20/06/2023. It included those who were present at the time of data collection. 10 samples were selected using random sampling method. The study was found to be feasible.

MAIN STUDY

The main study was conducted from 29/8/23 to 31/8/23.

RESULTS:

TABLE 1: Frequency and percentage distribution of socio demographic variables of students.

Variables		**Frequency**	**Percentage**
Age	18-21	20	20%
	22-25	50	50%
	26-29	27	27%
	>29	3	3%
Gender	Male	40	40%
	Female	60	60%
	Others	0	0%
Religion	Hindu	40	40%
	Islam	30	30%
	Christian	20	20%
	Others	10	10%
Year of study	2nd semester	20	20%
	4th semester	20	20%
	6th semester	30	30%
	8th semester	30	30%

Source of information	Internet	50	50%
	Friends	25	25%
	Books	15	15%
	Others	10	10%

Table 2: Frequency and percentage distribution of knowledge about telemedicine among the students.

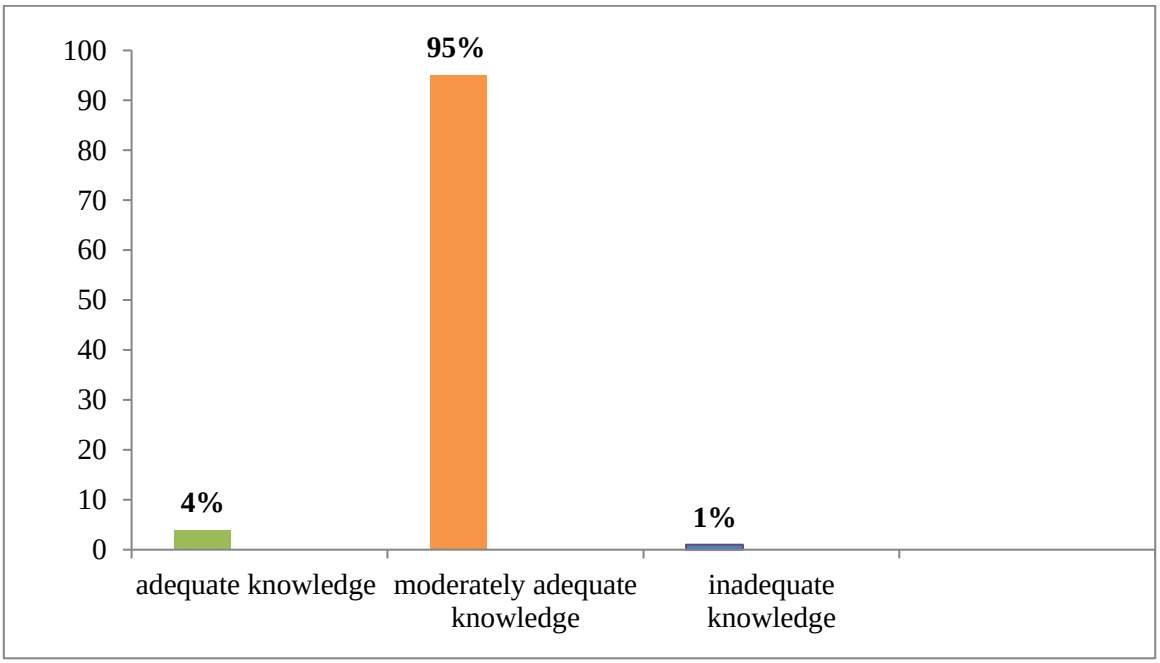

Table 3: Association between knowledge about telemedicine among the students with socio demographic variables

*NS- not significant

Variables	**Chi square**	**df**	**Tabulated value**	**Remarks**
Age	2.877	4	9.49	NS
Gender	1.71	2	5.99	NS
Religion	3.60	6	12.59	NS
Year of study	5.43	6	12.59	NS
Source of information	4.76	6	12.59	NS

RECOMMENDATIONS

1. A similar study can be undertaken with large sample size.
2. A similar study can be conducted on nursing students to assess their knowledge level regarding the use of telemedicine.
3. A similar study can be done by including more vast areas in the tool.
4. It is recommended that a similar study can be replicated on different health personnel.

CONCLUSION

The findings revealed that out of 100 students that is 95% have moderately adequate knowledge, 4% ha-

ve adequate knowledge and 1% have inadequate knowledge. The analysis infers that there is no significant association with socio-demographic variables.

Through this study, the investigator concluded that the students have moderately adequate knowledge and there was no significant association with socio-demographic variables. Even though the level of knowledge was moderate, there is still need to provide proper knowledge regarding telemedicine to health personnel and students.

REFERENCES

1. Kunwar B, Dhungana A, Aryal B, Gaire A, Adhikari AB, Ojha R. Cross-sectional study on knowledge and attitude of telemedicine in medical students of Nepal. *Health Sci Rep*. 2022;5:e532. doi: 10.1002/hsr2.532 [CrossRef] [Google Scholar]
2. Rupa K Malhotra1, Mohit K Ojha, Shipra Gupta, 2021. A study of assessment of knowledge, perception and attitude of using tele health services among college going students of Uttarakhand. Jour. of Med. P'ceutical & Allied. Sci. V 10 - S 2, 2020, Page 113-116. doi: 10.22270/jmpas.2021.V10S2.2020
3. Petimani MS, Bhat NP, Preethishree P, Adake P. Knowledge, attitude, and Practices of telemedicine among the health-care practitioners during COVID pandemic: A cross-sectional study. J Curr Res Sci Med 2022;8:37-43
4. Bhawana David. Assess the knowledge regarding telemedicine among staff nurses in selected hospital of Indore, M.P, International Journal of Advance Research, Ideas and Innovations in Technology.