



“A Study To Assess The Effectiveness Of Video Assisted Teaching On Knowledge And Utilization Of E-Sanjeevani (Opd) App Among People Undergoing Hemodialysis At District Head Quarters Hospital, Chittoor, Andhra Pradesh”

Ms. Julia.K.Jijo, Ms. Dilli Kumari, Ms. Gracy Angel, Ms. K Kasthuri, Ms. K. Nikhitha, Ms. Keerthana, Ms. Komala K, Mrs. B. Chithra Jayachandran.

BSc. Nursing students, Aragonda Apollo College of Nursing Aragonda, Chittoor, Andhra Pradesh.

Mrs. B.Chithra Jayachandran MSc.(N), M.A(CC&E) Head of the Department, Child Health Nursing, Aragonda Apollo College of Nursing.

ABSTRACT

Background: e-Sanjeevani is a doctor to patient telemedicine system through online has been deployed nationally for the in Ministry of Health & Family Welfare under Ayushman Bharath Scheme of Government of India. Through e-Sanjeevani OPD, anyone can get the medical advice through audio and video. It's one of the best Scheme under Digital India for public across the India launched by our Hon'ble Prime Minister of India Shri Narendra Modi. E Sanjeevani, health ministry's national telemedicine initiative today completed 19 lakhs consultations.

Materials and methods: This study was conducted at District Head Quarters Hospital among people undergoing hemodialysis patients using Quasi experimental research design. The research approach for the study used was Evaluative Approach. The study sample size consisted of 70 hemodialysis patients. Sample was selected by using purposive sampling technique. Data was collected by using checklist after doing video assisted teaching on e-Sanjeevani (OPD). App usage was shown to the patients and demonstrated lively to patients. Data was analysed using descriptive and inferential statistics.

Result: Result showed that among 70 patients 2(2.90%) had inadequate knowledge, 29(41.40%) had moderate knowledge, 39(55.70%) had adequate knowledge. The utilization of the e-sanjeevani(OPD) app showed that among 70 patients, 55(78.60%) are not aware of e-Sanjeevani OPD app, 13(17.40%) heard about the e-Sanjeevani OPD app, and 2(4.00%) patients had utilized e-Sanjeevani OPD app.

Conclusion: Telemedicine is an innovative solution to many of the challenges among hemodialysis patients. So, using this app can help them to consult doctor and get guidance regarding their symptoms in their home setting.

INTRODUCTION

**“It allows us to erase time and distance which is really
the miracle of telemedicine”**

BACK GROUND OF THE STUDY

As per American Telemedicine Association (ATA) Telemedicine is the natural evolution of health care in the digital world literally means HEALING FROM DISTANCE which is often used as an umbrella term that consists of health care delivery in addition to education research, health surveillance and promotion.

E-Sanjeevani OPD is functional in 28 states union territories in nation (ANI2021) overall the e-Sanjeevani OPD portal has crossed more than 30,00,000 consultations since its launch in April 2020. More than 300 speciality OPD have been setup on e-Sanjeevani OPD as per the latest press release the top states in term of number of e-Sanjeevani OPD are Tamil Nadu (9,86,400), Uttar Pradesh (7,33,370), Karnataka (6,96,929), Gujarat (2,02,042), Kerala (1,27,559), and Uttarakhand (1,02,464).

Andhra Pradesh topped the list of states using the centres integrated telemedicine services, e-Sanjeevani, regarding 1.3 crore teleconsultations-which is 43.7% of the total crore consultations in the country. Karnataka, West Bengal and Tamil Nadu followed Andhra Pradesh in the ranking.

One of the first private sector telemedicine based initiatives in India had concluded that “Telemedicine as a tool is very convenient and an ‘all-time-available facility for establishing patients-physician contact in the shortest time. It is useful in rendering instant advice for hospitalisation in emergency situations while avoiding unnecessary visits to the hospital”.

Hemodialysis patients may have concerns such as a feeling of isolation, a lack of connection with medical care and doubts and fear of complications which suggest that patients on dialysis may need additional support to improve their satisfaction and treatment adherence.

Bhatia et.al (2010) conducted a survey to determine the socio – political variables influencing the popularity of tele medicine. The study was based on the data collected

through questionnaire which was later analyzed and tested by applying statistical tools like reliability, validity and regression. The results of the survey concluded that collective efforts were required from the users, government, technologist, economics, physician, clinicians, nurses and other service providers to make adoption of tele medicine a great success.

Tele medicine is rapidly growing in the modern world of health care. This is also true for the treatment of kidney diseases and hemodialysis care. e-sanjeevani has brought several beneficial aspects include higher patient satisfaction, easier follow ups, reduced burden on health care centers, reduced costs, improved quality of life, and provides better prognosis, and comfortable environment to receive care for patients.

Benefits of e-Sanjeevani includes- increase in health care accessibility, reduction in overall health care cost of the individual real time referrals to emergency care to avoid complications provision of high quality care.

Telemedicine allows remote contact between patients and health professionals to improve adherence to the hemodialysis regimen and allow patients to feel connected.

NEED FOR THE STUDY

Hemodialysis patients are more prone to get adverse consequence like electrolyte imbalances which needs immediate treatment by reaching near hospital. So, using this app can help them to consult doctor and get guidance regarding their symptoms in their home setting.

Telemedicine services are very essential and important in a country like ours where the doctor patient ration is much lower than in the number prescribe by the world health organization (WHO). In India there is only one doctor for every 1445 Indians (the WHO recommended ratio is 1:1000). The availability of medical services including doctors is highly scarce and less in rural and remote areas of the country.

OBJECTIVES:

The objectives of the study were,

- To assess the pre- test knowledge of using e-Sanjeevani OPD app among people undergoing hemodialysis at district head quarter hospital, Chittoor.
- To assess the post- Test knowledge of using e-Sanjeevani OPD app among people undergoing hemodialysis at district head quarter hospital, Chittoor.

RESEARCH METHODOLOGY

Research approach

The Research approach for the study used is Evaluative Approach.

Research design

A Quasi experimental research design was adopted for the study.

Variables

The variables for the study were

Independent Variables: Video assisted teaching on knowledge and utilization of e-Sanjeevani OPD app.

Dependent Variables: People undergoing hemodialysis at District Head Quarters Hospital Chittoor.

Setting

The study was conducted at Hemodialysis Unit of District Headquarters Hospitals, Chittoor District. The setting was chosen on the basis of feasibility in terms of availability of adequate samples and cooperation extended by authorities, medical personnel and Nursing personnel.

Population

The population selected for this study comprised of Hemodialysis patients of District Headquarters Hospital.

Sample

People undergoing Hemodialysis who were fulfilling Inclusive criteria.

Sample size

The Sample Size consisted of 70 samples.

Sampling Technique

The Sampling Technique used for the study was Purposive Sampling Technique.

Hypothesis

- H1 – There will be significant relationship between knowledge and utilization of e-Sanjeevani.

CRITERIA FOR SELECTION OF SAMPLE

Inclusive Criteria

- The patients who are available during data collection in Hemodialysis unit.
- The Hemodialysis Patients who are willing to participate in the study.

Exclusive Criteria

- Those who are not available during data collection.
- Patient who participated in Pilot Study
- The Hemodialysis patients who are not willing to participate in the study.

DEVELOPMENT AND DESCRIPTION OF TOOL

The tool used for study consisted of two sections

- SECTION- I Socio Demographic data
- SECTION- II Checklist

Section-I

It consists of Socio Demographic Data such as Age, Gender, Marital Status of patient, Patients Educational Level, Occupation of patient, Income of patient, and Place of Residence of patient.

Section-II

It consists of semi structured check list which was used to assess the Knowledge regarding ESanjeevani (OPD) App among Hemodialysis Patient, which consists of “20” Questions, each question carries “1” Mark, Wrong Answer Carries “0” Mark. The Total Score is “20”. The score is categorized as follows

Score Interpretation

Adequate Knowledge	76-100 %
Moderate Knowledge	51-75 %
Inadequate Knowledge	<50%

RESULT

- Among 70 patients 0 – 15 years were 2(2.90%), 15 – 20 years were 10(14.30%), 30 – 50 years were 27(38.60%), and more than 50 years were 31(44.30%).
- Among 70 patients males were 52(74.30%), females were 18(25.70%).
- Among 70 patients singles were 2(2.90%), married were 66(94.30%), divorced were 1(1.40%), and widow were 1(1.40%).
- Among 70 patients illiterated were 2(2.90%), primary school completed were 45(64.30%), secondary school completed were 14(20.00%), undergraduate degree 9(12.90%).
- Among 70 patients 5(7.10%) were employed, 20(28.60%) were unemployed, 27(38.60%) were daily waged, and 18(25.70%) were retired.
- Among 70 patients 11(15.70%) had below 10,000 as monthly income, 35(50.00%) had Rs.10000 – 30000 as monthly income, 9(12.90%) had Rs. 30000-50000 as monthly income, 15(21.50%) had Rs.50000 – 70000 as monthly income.
- Among 70 patients 12(17.10%) were residing at urban, 35(50.00%) at rural, 23(32.90%) at semiurban.
- Pre-test showed that among 70 patients 55(78.60%) had inadequate knowledge, 15(21.40%) had moderate knowledge, 0(0.00%) had adequate knowledge.
- Post- test showed that among 70 patients 2(2.90%) had inadequate knowledge, 29(41.40%) had moderate knowledge, 39(55.70%) had adequate knowledge.
- The utilization of the e-sanjeevani(OPD) app showed that among 70 patients, 55(78.60%) are not aware of e-Sanjeevani OPD app, 13(17.40%) heard about the e-Sanjeevani OPD app, and 2(4.00%) patients had utilized e-Sanjeevani OPD app.

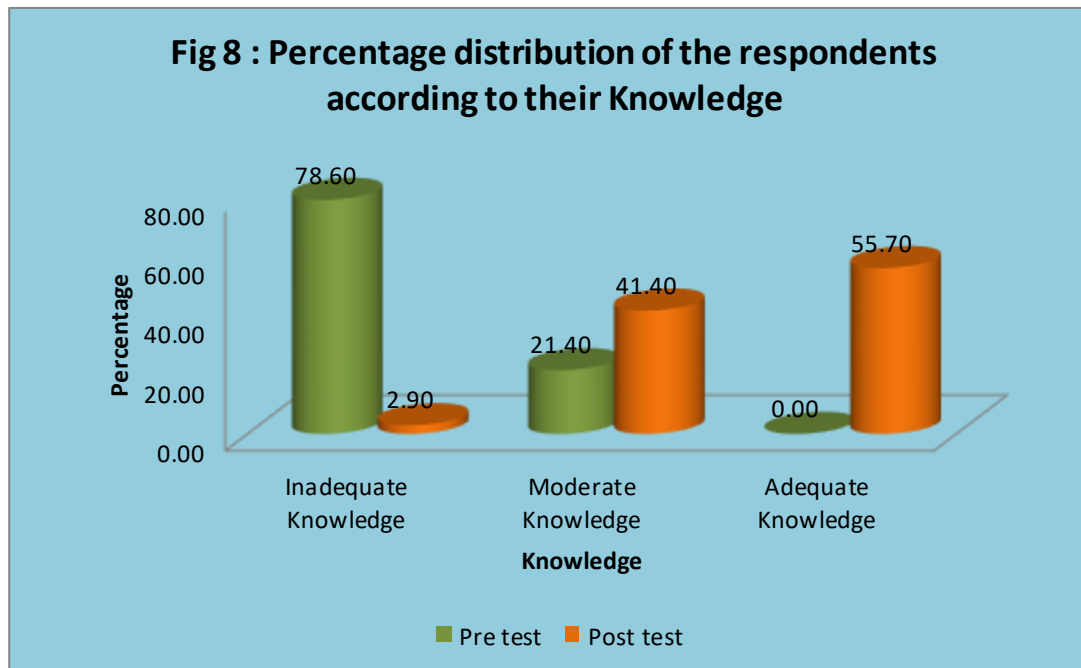
DISCUSSION

OBJECTIVE 1 – To assess the pretest knowledge of using e-Sanjeevani OPD app among people undergoing hemodialysis at District Head Quarter Hospital, Chittoor.

OBJECTIVE 2 – To assess the post test knowledge of using e-Sanjeevani OPD app among people undergoing hemodialysis at District Head Quarter Hospital, Chittoor.

N = 70

Sl.No	Level of Knowledge	Pre test		Post test	
		Frequency	Percent	Frequency	Percent
1	Inadequate Knowledge	55	78.60	2	2.90
2	Moderate Knowledge	15	21.40	29	41.40
3	Adequate	0	0.00	39	55.70
	Total	70	100.00	70	100.00



INFERENCE

The present study found that the pre-test knowledge of using E-Sanjeevani OPD app among people undergoing haemodialysis at district head quarter hospital Chittoor. Pre-test showed that among 70 patients 55(78.60%) had inadequate knowledge, 15(21.40%) had moderate knowledge, 0(0.00%) had adequate knowledge. The mean score was (5.80) with the standard deviation of (4.29).

The present study found that the post-test knowledge of using E-Sanjeevani OPD app among people undergoing haemodialysis at district head quarter hospital, Chittoor. Post-test showed that among 70 patient 2 (2.90%) had inadequate knowledge, 27 (30.60%) had moderate knowledge, 39 (55.70%) had adequate knowledge. The mean score was (15.44) with the standard deviation of (2.44).

CONCLUSION

The present study had found that among 70 patients, 2(2.90%) had inadequate knowledge, 27(30.60%) had moderate knowledge, 41(55.70%) had adequate knowledge on e-sanjeevani OPD app. 55(78.60%) are not aware of e-Sanjeevani OPD app, 13(17.40%) heard about the e-Sanjeevani OPD app and 2(4.00%) patients had utilized e-Sanjeevani OPD app. Present study showed that there was a significance relationship between knowledge and utilization of e-Sanjeevani OPD app at 0.01 level.

IMPLICATONS OF THE STUDY

The findings of the study have certain important implications for nursing practice, education, administration and research.

NURSING PRACTICE

Health care professionals will be positioned to advocate individuals and family in implementing knowledge on e-sanjeevani OPD app.

NURSING EDUCATION

- ❖ All nursing students can be enlightened with the knowledge regarding e-sanjeevani OPD app.
- ❖ It increases accessibility for nurses to reach remote patients through e-sanjeevani OPD app.
- ❖ It helps the nurses to provide quality virtual consultations.

NURSING ADMINISTRATION

- ❖ Nurse administrator can utilize the findings of the study and impart of e-sanjeevani OPD app education to the students.
- ❖ The nurse administration should plan for conduction of programmes in colleges, hospital, and community settings regarding e-sanjeevani OPD app.

NURSING RESEARCH

- ❖ The Researcher in this profession must focus on strategies to expand e-sanjeevani's reach.
- ❖ Nursing Research evaluates e-sanjeevani economic benefits.
- ❖ Nursing research informs health care policies and decision making.

RECOMMENDATIONS

- ❖ Similar study can be done in different settings like urban, rural, semi-rural.
- ❖ Similar study can be done in other areas like ART centres, emergency, OPD.
- ❖ Programmes can be conducted on improve the knowledge on esanjeevani OPD app.
- ❖ Experimental study can be done for assessing the practice of e-sanjeevani OPD app.

REFERENCE

Book references:

1. Suresh K. Sharma, Nursing Research and Statistics, 4th edition, Elsevier Publication, Page no: 111-140
2. Rajesh Kumar, A Textbook of Nursing Research and Statistics, 2nd Edition, Jaypee publication, Page no: 120-130
3. S. Madhavi et.al, Brunner & Suddarth's Text book of Medical-Surgical Nursing, 2nd Edition, Wolters Kluwer Publications, Page no: 1023-1112

Journal references:

- 1.D Kansal et.al,(2021), Perception of patients getting teleconsultations in an E- OPD during covid pandemic, Indian J pharmacol, Volume: 7,Issue(4), Page no:222-225.
2. Akhila Raj et.al, (2024), Technology and sociocultural barriers to e-Sanjeevani as a parallel means of health care, International conference on innovative trends in information technology(ICITIIT), Volume 1, Page no: 1-4.
3. Rathiga Srinivasan et.al, (2022), What's up in WhatsApp- Tele cytopathology experience connecting rural districts of Punjab to a tertiary care centre in India, Journal of the American Society of Cytopathology, Volume 11, Page no: S14-S15.
4. DR. C K Gomathy and et al,(2022), Machine Learning -Based clinical decision support system, International journal of scientific research in engineering and management (IJSREM) Volume: 06, Page no: 2582-3930
5. Dr C K Gomathy et.al,(2016), Web services composition in a Digitalized Health Care Environment for effect communications, International journal of Advanced Research in computer engineer technology (I JARCET),Volume 5, Page no: 2278-2323
6. Dr .C K Gomathy et.al,(2021), Machine learning -based clinical decision support system, International Journal of scientific research in engineering and management (IJSREM), Volume:06, Page no: 2265-2270
7. Dr C K Gomathy et.al,(2021), A Review on IOT based covid -19 patient health monitor quarantine, International research journal of engineering and technology (IRJET), Volume 5, Page no: 2395-2400.
- 8.Dr C K Gomathy and et.al, (2022), The Parkinson s disease detection using Machine learning technique, International Research Journal of engineering and technology (IRJET), Volume 08, Page no : 2450-2465.
9. P Sai Haritha et.al, (2017), A Medical information security using cryptosystem for wireless sensor networks, International journal contemporary research computer science and technology, Volume 3, Page no: 2395-5325
- 10.T. Jayanthi et.al, (2021), The Smart Stick Assistant For Visually Challenged People Using AI Image Recognition, International Research Journal Of Engineering and Technology (IRJET),Volume:08, Page no: 2601-2610.
11. Deepika Velan et.al, (2024), Digital health in your hands: A narrative review of exploring ayushman Bharat's digital revolution, World Journal of Advanced research and reviews, Volume 3, Page no: 1630-1641.

12. Vikrant Kanwar et.al, (2021), Utilization of Outpatient E - Sanjeevani National Tele consultation services during COVID 19 pandemic in a public Health care Institution in North India, Indian Journal of pharmacy and pharmacology, Volume 7, Page no. 265-269.
13. Aruna Singh et.al, (2023), Role of telemedicine in obstetrics and gynaecology: an experience at tertiary care center, Expert review of Medical Devices, Volume 12, Page no:1251-1256.
14. Chandrika Azad et.al, (2020), Using Telemedicine During the COVID 19 Pandemic, Indian Pediatrics, Volume (7), Page no:658-661.
15. Rajeev Ranjan et.al, (2020), Meeting of unmet mental health needs during covid 19: Where does telemedicine standards during these time in India, Journal of Psychiatria Danubina, Volume 4, Page no: 594-595.

Net Reference

- Health Ministry's flagship tele medicine service (Online). (Cited 2022 Mar 25). Available from: <https://pib.gov.in>.
- E-Sanjeevani – National Tele medicine Service. (Online). (Cited 2021 June 22). Available from: <https://services.india.gov.in>
- National tele consultation service in India: e-Sanjeevani. (online). (Cited 2021 Jan 31) available from: <https://csd.columbia.education.com>
- Guidelines tele medicines Ayushman Bharath health and wellness center's. (online). (cited 2022 Aug). available from: <https://esanjeevani.mohfw.gov.in>
- Telemedicine.(online).(cited 2022 sep30). Available from: <https://www.medicalnewstoday.com>
- Telemedicine e-health. (online). (cited 2022 dec 10). Available from : <https://home.liebertpub.com>
- What is hemodialysis- <https://www.mayoclinic.org.com>
- Types of dialysis <https://www.kidney.org.com>
- Procedure for dialysis <https://my.clevelandclinic.org.com>
- Hemodialysis, a type of dialysis <https://www.kidneyfund.org.com>
- India: teleconsultation through e sanjeevani2023 <https://www.statista.com>
- How to use e-Sanjeevani OPD portal <https://vikaspedia.in>
- E-Sanjeevani OPD 1.0 - a user guide <https://www.rajswasthya.nic.in.com>