A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING e-HEALTH SERVICES AMONG ELDERLY AT SELECTED URBAN COMMUNITY AREAS, KOLAR, WITH A VIEW TO DEVELOP INFORMATION PAMPHLET.



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#### PROJECT REPORT SUBMITTED TO

Sri Devaraj Urs College of Nursing Tamaka, Kolar,

As a part of Curriculum Requirement for

The Degree of Basic BSc(N)

UNDER THE GUIDANCE OF

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#### **DECLARATION BY THE CANDIDATE**

We hereby declare that this research project work entitled "A study to assess Knowledge and Attitude regarding e-health services among elderly at selected Urban community areas, Kolar with a view to develop information Pamphlet". Is a Bonafede research work carried out under the guidance of Mrs. Vani. R, Assistant professor, Community Health Nursing, Sri Devaraj Urs College of Nursing, Tamaka, Kolar.

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-Gilbert K Chesterton-

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ABSTRACT

**Title:** "A study to assess Knowledge and Attitude regarding e-health services among elderly

at selected Urban community areas, Kolar with a view to develop information Pamphlet".

Background: Electronic health (e-Health), or the integration of information and

communication technology (ICT) into the healthcare system and service, has emerged as an

important topic for healthcare professionals and senior services. E-health literacy is an

important indicator of personal health technology utilization. E-health technologies can

increase access to healthcare locally, regionally, and globally, lower costs, and improve

public and individual health through tailored treatment and aggregated health data. Older

adults can now access health information using the Internet due to the wide availability of

smartphones and tablets, which steadily increase their usage of e-Health services, such as

receiving appointment reminders, medication instructions, and telemedicine consultations and

participating in health programs.

**Aim:** To assess the knowledge and attitude of older adults on e-health services

**Methods:** A descriptive survey design was conducted in urban areas of the community in

Kolar, Karnataka using a structured knowledge questionnaire and a five-point Likert scale

among 100 older adults using a convenience sampling technique, and data were analyzed by

descriptive and Inferential statistics through SPSS version 20.

The results revealed that older adults were found to know about e-health services, 5% of

participants showed adequate knowledge and 75% showed moderate knowledge with only

20% of respondents having Inadequate knowledge. Concerning attitudes towards e-health

services it indicated that, the majority 80% of geriatric clients showed favourable attitudes,

moderately favourable 19%, and unfavourable 1%. It's found to be statistically significant for

variables like age, usage of e-health services & source of information.

**Conclusion:** Based on the findings of the study, reveals that e-health services among the

elderly are very essential, and attitude towards e-health utilization was proven to be

favourable among older adults. Hence, it's necessary to take measures in the hospital setup, to

initiate e-health services to access the health services without undue stress and time wastage

to wait for appointments.

**Key words:** E-Health services, Elderly, Knowledge, Attitude.

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#### **CHAPTER - I**

#### INTRODUCTION



'Research is creating new knowledge'

- Neil Armstrong

#### **INTRODUCTION**

## 'Research is a formalized curiosity. It is poking and prying with a purpose.'

#### -Zora Neala Hurston

The use of information and communication technology (ICT) in the healthcare system and services, often known as electronic health (e-Health), has become a hot topic among medical professionals and senior services. <sup>(1)</sup> E-health can be characterized as a novel approach to utilize information communication technology, particularly the Internet, to access health resources and enhance population health. <sup>(2,3)</sup>

E-health technologies are now being developed and adopted by traditional medicine at a rapid rate. <sup>(4)</sup> E-health technologies offer the potential to expand access to healthcare on a local, regional, and international level, reduce costs, and enhance public and individual health through individualized care and compiled health data. <sup>(5,6,7)</sup>

The World Health Organisation defines older adults as those who are 60 years of age or older. (8)

Easier access to and management of a range of healthcare resources, including information and services, is claimed to be one benefit of e-Health. Older individuals are more likely to struggle with a range of health issues than millennials, who use the Internet more frequently, so it is expected that they will frequently utilize the e-Health service. (9-12).

E-health includes a variety of systems, patients, healthcare providers, and service components <sup>(13)</sup>. Numerous apps can be used to continually track vital signs, support behaviors that encourage a healthy lifestyle, and support the self-management of chronic illnesses. Healthcare organizations typically have information about their doctors and services, downloadable forms, and patient education materials on non-secure patient-facing websites. Patients can check lab test results, order medicines, schedule appointments, and search for medical history through patient portals, which are available in the majority of health plans and medical practices. These portals also allow for safe communication between patients and clinicians. <sup>(14,15)</sup>.

With the help of online communities and forums, older people can now connect with others who share their health-related worries, download or buy medical supplies and apps, look up the findings of medical research, and learn more about various ailments, medications, and other treatments. (16,17,18). Because of this, e-health that makes use of ICT is now more important than ever (19), and e-health data is playing a growing role (20).

Due to the aging population in these communities and their increasing demand for patient-centred care, there is an increased demand for innovative information technology. Older people can now access internet health information due to the widespread availability of smartphones and tablets <sup>(21,22)</sup>. Modern patients are increasingly willing and capable of taking a more active role in health-seeking behaviour thanks to the pervasive Internet and mobile technological devices. <sup>(23,24)</sup>.

Older people began using the Internet later than younger generations, but as more people have access to computers and the Internet, they are utilizing it more regularly. (25) Several Web platforms provide their users with crucial medical information to meet the rising expectations of patients. (26,27,28).

Teleconsultation/diagnosis, telemonitoring of the EKG, blood pressure, blood glucose levels, and other parameters are only a few of the distant technological services that medical centers and primary healthcare facilities are rapidly providing. (29,30) Online health services like e-registration and e-prescribing, SMS appointment and medication reminders (31-34), short messaging service (SMS), and, most critically, clinical applications like teleconsultation/diagnosis (35) and telemonitoring of the EKG and blood pressure are all available today. There are resources for mHealth, which uses mobile devices to monitor health, and eHIA, which uses the internet. (,36).

The use of e-Health services by older individuals is on the rise, including getting reminders for appointments, directions for taking medication, and telemedicine consultations. The most popular e-Health services among seniors are obtaining medication or other medical supplies, accessing and monitoring personal health records, and participating in forums on self-help groups focused on health and illness. <sup>(37)</sup>A broader range of goals are outlined in Healthy People 2020's eHealth strategy, including "health communication strategies and health information technology to improve population health outcomes and health care quality and to promote health equity" <sup>(38)</sup>.

As a result, older persons will profit from the availability of e-health services in society by having easier access to healthcare needs and services.

#### **NEED FOR THE STUDY:**

## "Research is formalized curiosity. It is poking and prying with a purpose"

#### -Zona Neale Hurston

The development, prosperity, and innovation of the globe depend on e-health services. When there is a pandemic, such as the Covid outbreak, e-health services are helpful for quick communication and accessibility.

Both patients and medical professionals' profit from e-health. It offers patients the convenience of not having to travel to see a doctor, saving them time and money. It lowers the number of no-shows and cancellations during doctor's appointments for healthcare workers. Without needing to travel, patients can gain from specialists' experience. Healthcare professionals can connect with patients who would not otherwise have access to high-quality care in rural, semi-rural, and far-off locations.

Telehealth has proven to be an effective resource for patients seeking the advice of medical professionals during the COVID-19 epidemic <sup>[39]</sup>. Tanya Ngo's study in a student-run free clinic found that the majority of patients (97.6%) were pleased with their telehealth experience <sup>[40]</sup>. Furthermore, a survey of 1010 participants found that overall satisfaction with telehealth in primary care was high, with 91% of respondents being happy with video consultations and 86% with telephone consultations <sup>[41]</sup>.

The outcome is an aging global population. The number of persons 60 years or older has tripled over the past 50 years, and by 2050, it's predicted to increase by another thrice, reaching over two billion. <sup>(42)</sup> Population aging is a global issue that affects all geographical areas. Older adults made up 10% of the population globally in 2000, up from 8% in 1950, and are expected to make up 21% by 2050. <sup>(43)</sup>

To address current and future barriers to health care access and lessen health inequities, information and communication technologies (ICTs) for digital health or eHealth initiatives, such as computers, smart phones, the Internet, and other communication devices, may be used (44).

Overall, the group that received no reminders had an attendance percentage of 67.8%; the group that received reminders through text message was 78.6%; and the group that received reminders by phone call was 80.3%. One study said generally that there were no negative consequences during the study time, but none of the other studies provided particular information on negative occurrences such as loss of privacy, incorrect data interpretation, or failed message delivery (45).

ICTs have been acknowledged as crucial in the transformation of health care systems and the delivery of patient-centered care to overcome challenges associated with aging and cater to the needs of older adults as health and social care benefit from the digital revolution. It offers exceptional chances for equal access to healthcare to manage and enhance older individuals' health promotion strategies and quality of life through remote monitoring, webbased systems for online consultation, online medicine orders, and online report retrieval.

Since e-Health is crucial for overcoming upcoming obstacles and pandemics, the researcher deemed it necessary to promote e-Health literacy among older persons.

The study's goal is to evaluate how well senior people in this generation can get the health care they need thanks to e-health services.

# CHAPTER - II OBJECTIVES



#### TITLE OF THE TOPIC

"A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING e-HEALTH SERVICES AMONG ELDERLY AT SELECTED URBAN COMMUNITY AREAS, KOLAR, WITH A VIEW TO DEVELOP INFORMATION PAMPHLET"

#### **OBJECTIVES**

- 1. To assess the level of knowledge regarding e-health services among the elderly by using a structured knowledge questionnaire.
- 2. To assess the attitude regarding e-health services among the elderly by using the Likert scale.
- 3. To determine the correlation between knowledge and attitude regarding e-health services.
- 4. To find out the association between knowledge and attitude scores regarding e-health services among the elderly and selected socio-demographic variables.

#### **RESEARCH HYPOTHESIS**

**H1:** There will be a significant correlation between knowledge and attitude scores regarding e-health services among the elderly.

**H2:** There will be a significant association between knowledge and attitude scores regarding e-health services among the elderly.

#### **Assumption:**

- 1. Elderly may have some basic knowledge regarding e-health services.
- 2. Elderly may have some attitude towards e-health services.
- 3. Pamphlet may improve knowledge and attitude of e-health services among the elderly.

#### **Operational definition:**

**Knowledge:** In this study, Knowledge refers to the Understanding of the importance of e-Health services, collection of experiences, and appropriate information regarding the e-health services among the elderly in urban community areas using a structured knowledge questionnaire.

**Attitude:** In this study, an attitude refers to the settled way of elderly feel, beliefs, and think about the e-health services among the elderly in urban communities using the Likert scale.

**e-health services:** In this study, it refers to the Use of digital technologies & telecommunications such as computers, internet, and mobile devices, to facilitate health improvement and health care services by obtaining online health services such as consultation appointments, Medicine ordering, reports of investigations, WhatsApp video call, etc...

**Elderly:** In this elderly refers to the population within the age group of 60-75 years and residing in urban areas of the community.

**Urban community areas:** In this study, it refers elderly population residing in particular geographical urban areas at Kolar.

# CHAPTER - III REVIEW OF LITERATURE



"RESEARCH IS TO SEE WHAT EVERYBODY ELSE HAS SEEN, AND TO THINK WHAT NOBODY ELSE HAS THOUGHT"

-ALBERT SZENT GYORGYI-

#### **REVIEW OF LITERATURE**

#### "Research is creating new knowledge"

-Neil Armstrong-

#### The review of literature is categorized as per the following headings

- 1. Importance of e-Health among elderly
- 2. Factors affecting the e-Health service utilization

#### 1. IMPORTANCE OF E-HEALTH AMONG ELDERLY

A cross-sectional study was conducted in China to examine the association among health-promoting lifestyle, e-health literacy, and cognitive health among 1201 Chinese older adults aged 60 and above by using a stratified cluster sampling method. The result showed that health-promoting lifestyles and eHealth literacy were significantly and positively associated with cognitive health (both p < 0.01). In addition, eHealth literacy was positively associated with health-promoting lifestyles. Moreover, the interaction of a health-promoting lifestyle and eHealth literacy negatively predicted cognitive health ( $\beta = -0.465$ , p < 0.01). Further, eHealth literacy was associated with health-promoting lifestyles in older adults. Therefore, interventions regarding healthy lifestyles and eHealth literacy would benefit older adults. (46)

A systematic literature review was conducted on learning and use of e-health among older adults living at home in rural and nonrural settings in India by using 31 empirical studies published between 2010 – 2020. The result showed that a total of 17 articles included participants from rural and remote areas. The most regularly reported barriers related to older adults' learning to use and use eHealth were health-related difficulties, such as cognitive impairment or impaired hearing. The most reported enabler was the support provided for older adults in learning and use of eHealth. Support mainly comprised older adults' digital competencies, which were distributed with their social network. It was found that eHealth technology is needed for rural and remote areas to facilitate access and reduce logistical barriers to health care services. The study concluded that the literature review provided information and practical implications for designers, health care providers, and policy

makers. Based on these findings, eHealth technologies should be easy to use, and adequate support should be provided to older adults for use (47)

A mixed-method cross-sectional study was conducted on exploring telehealth readiness in resources limited setting among 150 older adults in Mysore by using a standardized questionnaire. The result showed that nearly two-thirds of participants were male (62.7% vs. 37.3% females), with a median age of 71 years (65–99 years). Most participants (67.4%) had only primary education. The most reported current condition was diabetes mellitus (30%), followed by hypertension (18%) and eye or sight-related conditions (14.7%). Whilst 79.3% of participants reported JSS Hospital to be the hospital they visited normally, 90% reported having a community health facility that was closer to their place of residence. Sixty-two percent of participants reported having two or more visits to JSS Hospital in the previous 12 months, with a median travel time of 45 (5–360) min. The study concluded as low rates of technology adoption, as well as poor digital, health, and eHealth literacy, among the current sample with limited experience and exposure to technology and low confidence contributed to this phenomenon. Strong social support from family and local primary healthcare providers are potential enablers for future considerations to use technology to bridge inequities in healthcare, coupled with the adoption of a simple technology that overcomes poor literacy and physical aspects of aging as barriers to technology use. (48)

A qualitative study was conducted in Europe about the multi-stakeholder approach to e-Health development: Promoting sustained healthy living among cardiovascular patients by using user-centered design principles from the CeHRes roadmap and the data were synthesized from various qualitative studies and usability tests and also use an innovative application evaluation tool to perform a competitor analysis on 33 eHealth applications. The results showed that the uncovered 10 universal values to which eHealth-based initiatives to support healthy living in the context of CVD prevention and rehabilitation should adhere. These values were translated to 14 desired core attributes and then prototype designs. Interestingly, we found that the primary attribute of good eHealth technology was not a single intervention principle, but rather that the technology should be in the form of a digital platform disseminating various interventions. The study concluded as various stakeholders in the field of cardiovascular prevention and rehabilitation may benefit most from utilizing one

personalized eHealth platform that integrates a variety of evidence-based interventions, rather than a new tool <sup>(49)</sup>

A cross-sectional study conducted in Australia on the determinants of eHealth usage among elderly people with a disability: The moderating role of behavioral aspects among elderly by using survey method. The results showed that several factors are associated with an increased likelihood of using eHealth services, including higher educational attainment employment, higher household income, and ICT access. The probability of eHealth use is lower for the oldest-old. In addition, the estimates from interaction effects suggest the effect of ICT penetration on the use of eHealth falls by a negligible amount because of resistive attitudinal barriers. The study concluded the presence of a significant digital divide among elderly PwD and suggests that public and private efforts should be made to increase the availability of ICT infrastructure. (50)

#### 2. FACTORS AFFECTING THE E-HEALTH SERVICE UTILIZATION

A systematic literature review was conducted in China on e-health literacy and influencing factors to explore the current status of e-health literacy among Chinese older adults by using a mixed-method assessment tool. The results showed that the e-health literacy of Chinese older adults was low. Based on the social-ecological model, the influencing factors at the individual level included age, gender, educational attainment, socioeconomic status, physical and psychological conditions, frequency of internet use, and credibility perception of online health resources; at the interpersonal level, the influencing factors included marital status, being the family carer and being taught how to use the internet to find health resources; at the social/community level, influencing factors included language barriers and cultural barriers. The study concluded that it is necessary to develop intervention programs tailored to the varied educational needs of the elderly with different backgrounds need to be developed & Family members are encouraged to teach older adults how to use e-health resources in appropriate ways. (51)

A cross-sectional study was conducted on correlates of older adults' e-health information-seeking behaviors to identify the potential motivators and probable barriers of e-health information-seeking behavior among 320 older Iranian adults by using a self-reported survey questionnaire. A convenience sampling method was used. The result showed that the self-efficacy for online information seeking, positive attitude toward e-HISB, and perceived

usefulness increased the odds of e-HISB by 12.00%, 24.00%, and 15.00%, respectively. In addition, e-health literacy, conflicting information, distrust of online information, and web designs that were not senior-friendly were the major barriers to e-HISB. The study concluded as the theoretical and practical implications of the motivators and barriers of e-HISB can be instrumental in designing and executing programs aimed at improving e-health literacy among older adults, especially during the COVID-19 pandemic (52)

A systematic review was conducted on factors determining the success and failure of e-health interventions by using 903 identified articles under a PubMed data base to understand the factors influencing the outcome of e-health interventions in terms of success and failure. The result showed that among the 903 identified articles, a total of 221 studies complied with the inclusion criteria. A quantitative analysis of the results revealed the category quality of healthcare (n=55) as the most mentioned as contributing to the success of eHealth interventions, and the category costs (n=42) as the most mentioned as contributing to failure. For the category with the highest unique article frequency, workflow (n=51), we conducted a full-text review. The analysis of the 23 articles that met the inclusion criteria identified 6 barriers related to the workflow: workload (n=12), role definition (n=7), undermining of face-to-face communication (n=6), workflow disruption (n=6), alignment with clinical processes (n=2), and staff turnover (n=1). The study concluded suggested that, there is a critical need to increase the likelihood of success of eHealth interventions, future research must ensure a positive impact on the quality of care, with particular attention given to improved diagnosis, clinical management, and patient-centred care (53)

A systematic review was conducted in United Nations on barriers and facilitators to the use of e-health by older adults .14 papers were included and synthesized into five thematic categories and related subthemes by using Meta-Analyses, Scoping Review extension (PRISMA-ScR) guidelines, and uses a scoping review methodology outlined by Arksey and O'Malley. The results showed that the barriers and facilitators to older adults accessing e-health were each mapped into five thematic categories (1) *individual*, including intrinsic and extrinsic; (2) *technological*, including functionality, content, and availability; (3) *relational*, including technological support and social support; (4) *environmental*, including location; and (5) *organizational*, including privacy, trust, and the sharing of data. The study concluded as consideration of the specific barriers and facilitators that influence the use of e-health by older adults is critical to improve their use of e-health programs and to realize the potential of technology to ameliorate the challenges associated with traditional

healthcare for this group. Findings from this review suggested that older adults are more likely to use e-health services that are cognizant of their physical and functional needs, provide appropriate education and training to engage with e-health, address previous negative experiences of, and misconceptions about, digital health technologies; and employ strategies to enhance the perceived trustworthiness and credibility of e-health. (54)

### CHAPTER -IV RESEARCH METHODOLOGY



"It's important to get results from experiment but the most important is the process in getting those results"

-Dr. Nik Ahmad Nizam-

**CHAPTER-2** 

RESEARCH METHODOLOGY

"Research is to see what everybody else has seen, and to think what nobody

else has thought."

-Albert Szent Gyorgyi-

Research methodology is a way to systematically solve the research problem. This

chapter includes an explanation of methods, research approach, design, setting of the study,

population, sample and sampling technique, sample size, criteria for sample selection, data

collection instrument, and development of the tool.

RESEARCH APPROACH

The research approach is the whole design including assumption, the process of

inquiry, the type of data collected, and the measuring of findings.

The research approach used in the study was the Quantitative approach.

**RESEARCH DESIGN** 

The research design refers to a researcher's overall plan for obtaining an answer to the

research question(or) for testing the research hypothesis.

The research design adopted for this study was a descriptive survey design.

**VARIABLES** 

**Study variables:** Knowledge and Attitude

• **Demographic variables:** age, gender, educational qualification, type of family, family annual income, Level of android\computer experience, duration of time spent on the internet per day & Chronic diseases.

#### **SETTING**

The term setting refers to the specific place where data collection occurs.

The setting selected for the present study will be selected urban areas, Kolar.

#### **POPULATION**

The term population means in the target population represent the entire group or all the elements like individuals or objective that need certain criteria for inclusion in the study.

The population for the present study comprises elderly from urban areas of Kolar.

#### **SAMPLE**

Sample refers to a subset of the population that is selected to collect data in a particular study.

The sample for the present study consists of elderly people age group of 60-80 years.

#### **SAMPLE SIZE**

100 elderly population between the age group (60 -75 years) from urban areas of Kolar.

#### **SAMPLING TECHNIQUE**

A convenience sampling technique will be adopted for the present study.

#### **SAMPLING CRITERIA:**

#### > INCLUSION CRITERIA

#### Elderly who are,

- 1. Elderly between the age group 60-75 years
- 2. Able to read and understand Kannada or English language
- 3. Elderly residing in urban areas of Kolar

#### **EXCLUSION CRITERIA:**

#### The elderly will have,

- 1. Physical and psychological disability
- 2. Who is terminally ill
- 3. Unwilling to participate in the study

#### DATA COLLECTION OF THE TOOL

The adopted tool consisted of the following sections.

- ➤ **SECTION A:** It contains demographic variables of the elderly such as age, gender, educational qualification, type of family, family annual income, Level of android/computer experience, and duration of time spent on the internet per day. Chronic diseases.
- > **SECTION B:** Knowledge regarding e-health services among the elderly by using a Structured Knowledge Questionnaire consisting of 20 multiple-choice questions.
- > **SECTION C:** Attitude regarding e-health services among the elderly by using a 5-point Likert scale consisting of 12 items.

#### METHODS OF DATA COLLECTION

#### The data was gathered in the following steps:

- **STEP 1:** Formal Ethical clearance will be obtained from the research and Institutional ethics committee of the institution.
- **STEP 2:** Permission will be obtained from the medical officer of particular urban areas Kolar.
- **STEP 3:** The samples will be selected by using convenience sampling techniques based on the inclusion criteria of the study.
- **STEP 4:** Basic information regarding the purpose of the study will be explained to the participants.
- **STEP 5:** Informed written consent will be obtained from study participants before collecting data.
- **STEP 6:** Data will be conducted by using a structured knowledge questionnaire for knowledge and Likert scale for attitude from 100 participants during the period.
- **STEP 7:** After obtaining data, the data will be analyzed by using descriptive and inferential statistics. An informational pamphlet regarding e-health services will be distributed to the participants.

#### SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

"Assess Knowledge and Attitude regarding e-health services among elderly at selected Urban community areas, Kolar with a view to develop information Pamphlet". -Descriptive survey Design



**RESEARCH DESIGN:** -Descriptive survey Design



**SETTING:** - selected urban areas, Kolar.



**SAMPLE AND SAMPLE SIZE: -**100 Geriatric clients



**SAMPLE TECHNIQUES:** - Convenience sampling technique



**DATA COLLECTION TOOLS:** -Structured knowledge questionnaire and Likert scale



**ANALYSIS AND INTERPRETATION: -**Descriptive and Inferential Statistics

#### Fig.1 SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

#### PLAN FOR DATA ANALYSIS

The data gained was analyzed by using Descriptive and Inferential statistics in completing the objectives of the study.

#### ETHICAL CLEARANCE

Ethical clearance was obtained from the institution's ethical committees, Sri Devaraj Urs College of Nursing and study permission got from the medical officer of the Urban health center. Information was taken from study participants before collecting the data.

#### **SUMMARY**

This chapter on methodology has dealt with research approach, research design, setting, population, sample and sampling technique, developing and description of tools, data collection, plan for data analysis, and ethical related to conducting research

# CHAPTER - V DATA ANALYSIS AND INTERPRETATION



#### "Data is the new science. Big data holds the answers"

-Pat Gelsinger-

#### DATA ANALYSIS AND INTERPRETATION

#### "Research is creating new knowledge"

-Neil Armstrong-

Data analysis and the interpretation of the study's findings are covered in this section. The process of inspecting, purifying, manipulating, and modelling data to find relevant information, make inferences, and support decision-making.

Based on the aims of the study of findings are organized as follows:

- > Section A: Socio-Demographic Proforma
- > Section B: Knowledge of geriatric people in urban areas regarding e-health services
- > Section C: Attitude of geriatric people in the urban area regarding e-health Services

TABLE-1: Frequency and distribution of sociodemographic variables of the study

n = 100

Sl.no	Sample characteristic	Frequency (f)	Percentage (%)	
1.	Age (in Years)			
	60-70	65	65	
	71-80	35	35	
2.	Gender			
	Male	49	49	
	Female	51	51	
3.	Educational qualification			
	No formal education	29	29	
	Primary education	58	58	
	Secondary education	13	13	
4.	Type of family			
	Nuclear	68	68	
	Joint	32	32	
5.	Family income			
	BPL	80	80	
	APL	20	20	
6.	Current occupation			
	Employed	38	38	
	Unemployed	62	62	
7.	Level of computer usage experience			
	Skilled	39	39	
	Nonskilled	61	61	
	<b>Hours spent on the Internet u</b>	sing	•	
8.	Not using	56	56	
	1-9 hour	44	44	
	Using e-health services			
9.	Yes	28	28	
	No	72	72	
10	Source of information			
10.	Mass media	19	19	

Family members	81	81
· · · · · · · · · · · · · · · · · · ·		

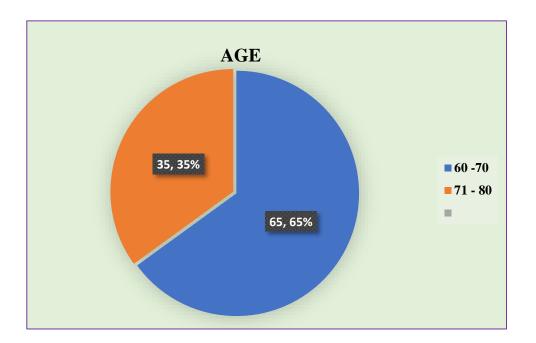


FIG2: Pie diagram showing age in years among geriatric study participants



FIG 3: The bar diagram depicts the gender of the study participant

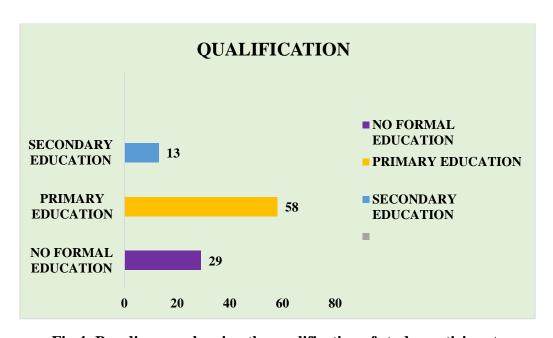


Fig 4: Bar diagram showing the qualification of study participants

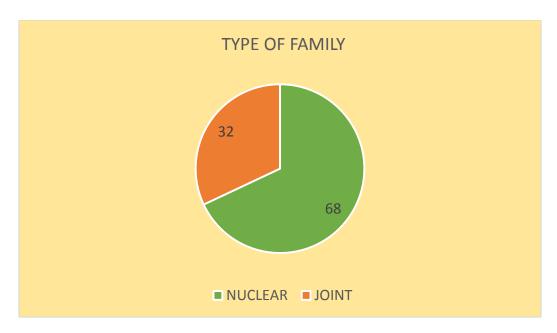


Fig 5: Pie diagram showing the type of family among geriatric clients



Fig 6: Bar diagram indicating the Family income of the participants

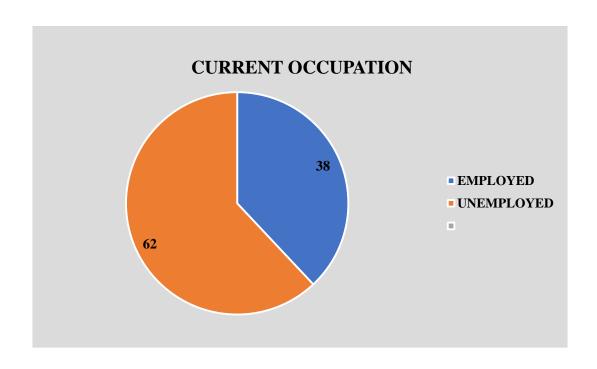


Fig 7: Pie diagram indicating the current occupation of study participant

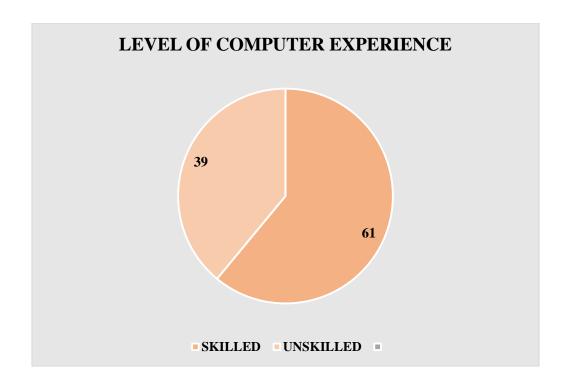


Fig 8: Pie diagram showing the level of computer experience of participants

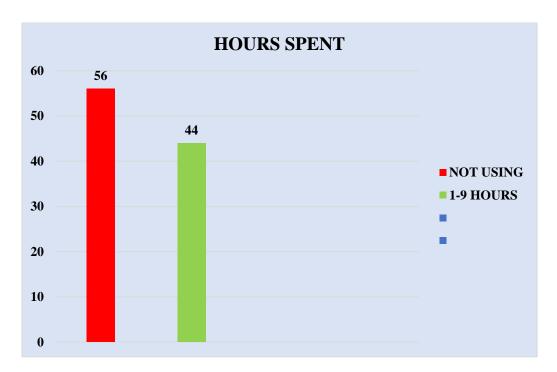


Fig 9: Bar diagram indicating hours spent on internet usage by the participants

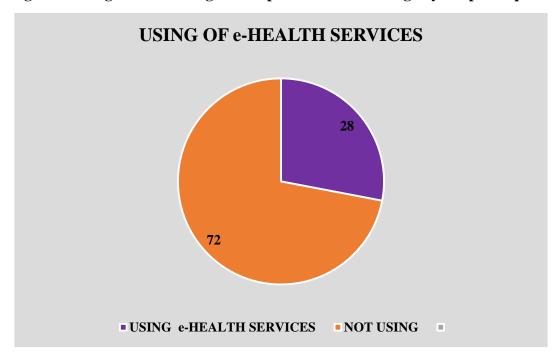


Fig 10: Pie diagram showing the percentage of e-health service usage

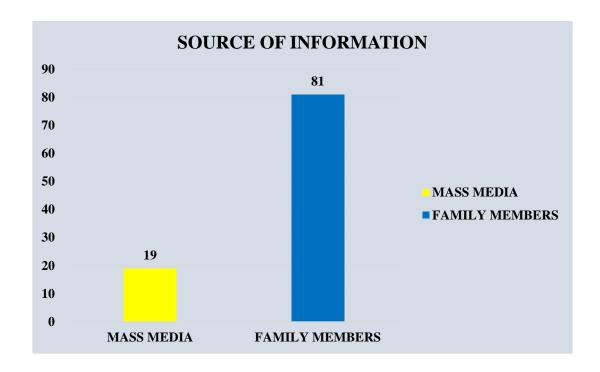


Fig 11: Bar diagram indicating sources of information regarding e-health services

- **1. Age:** The majority 60% of participants were between the ages of 60 and 70, and 35% of participants were between the ages of 71 and 80.
- **2. Gender:** Out of 100 participants 51% of the participants were women, while 49% participants were men.
- **3. Educational qualification:** Out of 100 participants, 29% participants had no formal education, 58% participants had completed their primary education, and 13% participants had finished high school.
- **4. Type of family:** 68% of participants, are from nuclear families, and 32% are from joined families
- **5. Family income:** The majority 80 percent of the participants belonging the BPL group, and the remaining 20 percent belonging the APL category.
- **6. Current occupation:** From the 100 study samples 62% of study samples are unemployed, and 38% of study samples are employed.

- **7. Level of computer experience:** Out of 100 participants, 39% of participants have expertise in using computers at a skilled level, and the remaining 61% of participants have less experience in using computers.
- **8. Hours spent on the Internet using:** The majority of study participants, 44% of participants using the Internet, and 56% participants do not use the Internet.
- **9. Usage of e-health services:** About 72% of participants have not used e-health services and 28% of participants have used e-health services.
- **10. Source of information:** Of the 100 study participants, 81% of participants getting information through family, and the remaining 19% of participants got information from the mass media.

TABLE-2: Frequency and distribution of Knowledge of geriatric people in urban areas regarding e-health services

Knowledge	Frequency	Percent (%)
Adequate (>75%%)	5	5%
Moderate (51 – 75%)	75	75%
Inadequate (50%)	20	20%
Total=	100	100%

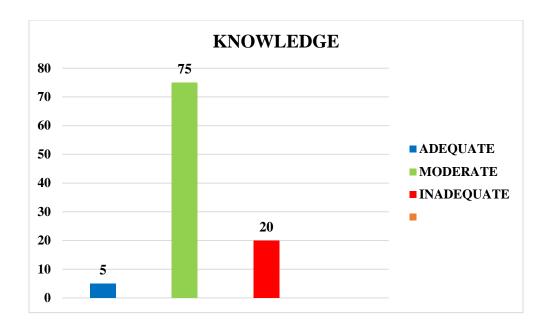


Fig 12: Bar diagram showing knowledge distribution about e-health among Geriatrics

The data analysis and interpretation of the research findings are covered in this chapter. According to the study's stated goals, the knowledge of e-health services among geriatric individuals was evaluated. The findings showed that out of 100 participants, 75% (75) participants had moderate knowledge, 20% (20) participants had inadequate knowledge, and 5% (5) participants had adequate knowledge. The results of the assessment of the relationship between sociodemographic factors and knowledge of e-health services showed that there is no significant relationship between any of the demographic factors.

TABLE-3: Frequency and distribution of Attitudes of geriatric people in the urban areas regarding e-health services

Attitude	Frequency	Percent (%)
Good	80	80%
Moderate	19	19%
Negative	1	1%
Total	100	100%
13141	100	10070

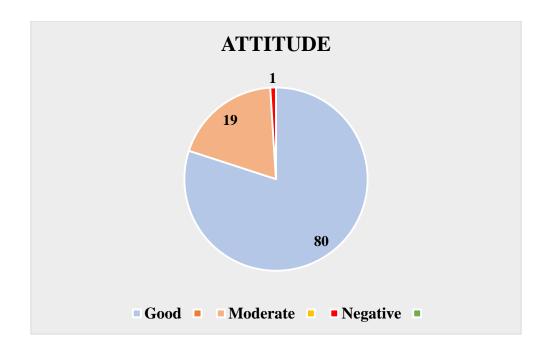


Fig: Pie diagram indicating the distribution of attitudes regarding e-health among Geriatrics

According to the study's goal, which was to determine how geriatric individuals felt about e-health services, the findings showed that 80% (80) of study participants had positive attitudes, 19% (19) had moderate attitudes, and 1% (1) had negative attitudes. Age, e-health service use, and information source were found to have a significant relationship when sociodemographic factors and attitudes towards e-health services were assessed. However, there was no statistically significant relationship between gender, education, family structure, family income, current employment, computer experience, or hours spent.

TABLE 4: Association between Demographic variables with the level of knowledge regarding e-health services among geriatrics

	Demographic	Knowled	lge level	Df	χ2	P value
	variables	Below or equal to the Median (<8)	Above Median (>8)			
1.	Age	33 19	32 16	1	0.1127	.73708 NS p < .05
2.	Gender	25 27	24 24	1	0.0369	.847592 NS p < .05
3.	Educational			2	1.3328	.513542

	qualification	13	16			NS
	1	33	25			p < .05
		6	7			1
4.	Type of			1	2.0786	.149375
	family	32	36			NS
		20	12			p < .05.
5.	Family				2.8946	.088875
	income	45	35	1		NS
		7	13			p < .05.
6.	Current			1	0.0098.	.921162
	occupation	20	18			NS
	_	32	30			p < .05
7.	Computer			1	0.4982	.480285
	experience	22	17			NS
		30	31			p < .05
8.	Hours spend				2.12	.145387
		33	23	1		NS
		19	25			p < .05.
9.	Using of e-				0.4836	.486782
	health	13	15	1		NS
		39	33			p < .05.
10.	Source of	·			0.2016	.653436
	information	9	10			NS
		43	38	1		p < .05.

**NOTE:** p 0.05, \*SS – Statistically Significant, NS – Non-Significant, Table value Df-1(3.84), Df-2(5.99).

**Age:** At the 5% level of significance, the calculated x2 value (0.1127) is less than the table value (3.84). There is therefore no connection between participants' age and their understanding of e-health services.

**Gender:** At the 5% level of significance, the obtained x2 value (0.0369) is lower than the table value (3.83). Because of this, there is no connection between participants' gender and their understanding of e-health.

**Education:** At a 5% level of significance, the obtained value (1.3328) is less than the table value (5.99). As a result, there is no connection between an individual's educational background and their knowledge of e-health.

**Family type:** At the 5% level of significance, the obtained value (2.0786) is less than the table value (3.83). As a result, there is no connection between a family's kind and its understanding of e-health services.

**Family income:** At a 5% level of significance, the obtained value (2.8946) is smaller than the table value (3.83). Because of this, there is no connection between family income and awareness of e-health services

**Current Occupation:** At the 5% level of significance, the obtained value (0.0098) is smaller than the table value (3.83). As a result, there is no connection between a person's work today and their familiarity with e-health.

**Computer knowledge:** At the 5% level of significance, the obtained result (0.4982) is less than the table value (3.83). As a result, there is no connection between a person's understanding of e-health services and their computer experience.

**Hours spent on the Internet using:** At a 5% level of significance, the obtained result (2.12) is less than the table value (3.83). As a result, there is no correlation between the number of hours spent online and awareness of e-health services.

**Usage of e-health services:** the obtained value (0.4836) is significantly smaller than the table value (3.83) at the 5% level. As a result, there is no discernible connection between the use of e-health services and individuals' awareness of e-health.

**Source of information:** At the 5% level of significance, the obtained value (0.2016) is less than the table value (3.83). As a result, there is no connection between a person's informational source and their familiarity with e-health services.

TABLE 5: Association between Demographic variables with attitude regarding e-health services among geriatrics

SI No	Demographic variables	Attitude Below or equal to the Median (<40)	Above Median (>40)	Df	χ2	P value
1.	Age			1	4.0575	.043976
		29	36			SS *
		23	12			p < .05.
2.	Gender			1	3.2177	.072846
		21	28			NS
		31	20			p < .05.

3.	Educational			2	3.8501	.145866
	qualification	17				NS
		25	12			p < .05
		9	33			
			4			
4.	Type of			1	2.4395	.118315
	family	39	29			NS
		13	19			p < .05.
5.	Family			1	3.2452	.071633
	income	38	42			NS
		14	6			p < .05.
6.	Current			1	0.0982	.753974
	occupation	19	19			NS
		33	29			p < .05
7.	Computer			1	0.8754	.349451
	experience	18	21			NS
		34	27			p < .05.
8.	Hours spend			1	2.4478	.117689
		33	23			NS
		19	25			p < .05.
9.	Using of e-			1	5.3019	.021302
	health	20	8			SS*
		33	39			p < .05
10.	Source of			1	10.3527	.001293
	information	16	3			SS*
		35	46			p < .05

**Note:** p<0.05, \*SS-Statically significant, NS- Non significant, Table value Df-1 (3.83), Df-2(5.99)

**Age:** The obtained value (4.0575) is more than the table value (3.83) at a 5% level of significant. As a result, there is a significant association between the age of participants with their attitude related to e-health services.

**Gender:** The obtained value (3.2177) is less than the table value (3.83) at a 5% level of significant. As a result, there is no significant relationship between gender and attitude regarding e-health services.

**Educational qualification:** The obtained value (3.8501) is less than the table value (5.99) at a 5% level of significant. As a result, there is no significant relationship between the qualification of participants and their attitude regarding e-health services.

**Type of family:** The obtained value (2.4395) is less than the table value (3.83) at a 5% level of significant. As a result, there is no significant relationship between the type of family and the attitude related to e-health services.

**Family income:** The obtained value (3.2452) is less than the table value (3.83) at a 5% level of significant. As a result, there is no significant relationship between family income and their attitude regarding e-health services.

**Current occupation:** The obtained value (0.0982) is less than the table value (3.83) at a 5% level of significant. As a result, there is no significant relationship between the current occupation with their attitude regarding e-health.

**Computer experience:** The obtained value (0.8754) is less than the table value (3.83) at a 5% level of significant. As a result, there is no significant relationship between the computer experience with their attitude regarding e-health services.

**Hours spent:** The obtained value (2.4478) is less than the table value (3.83) at a 5% level of significant. As a result, there is no significant relationship between the hours spent for internet using and their attitude regarding e-health services.

**Usage of e-health services:** The obtained value (5.3019) is more than the table value (3.83) at a 5% level of significant. As a result, there is a significant association between the usage of e-health services and their attitude regarding e-health services.

**Source of information:** The obtained value (10.3527) is more than the table value (3.83) at a 5% level of significant. As a result, there is a significant relationship between the source of information and the attitude regarding e-health services.

**CHAPTER-VI** 

**DISCUSSION** 



#### **DISCUSSION**

The growing aging population has increased focus on E-health services. E-health services play a major role in enhancing the health of geriatric clients.

This chapter deals with a detailed discussion of the findings of the study interpreted from the statistical analysis. The findings are discussed the objectives, the need for the study, and related literature of the study. The study goal was to assess the Knowledge and Attitude of geriatric clients toward e-health services.

#### **OBJECTIVES OF THE STUDY:**

- 1. To assess the level of knowledge regarding e-health services among the elderly by using a structured knowledge questionnaire.
- 2. To assess the attitude regarding e-health services among the elderly by using the Likert scale.
- 3. To determine the correlation between knowledge and attitude regarding e-health services.
- 4. To find out the association between knowledge and attitude scores regarding e-health services among the elderly and selected socio-demographic variables.

#### **HYPOTHESES:**

The hypotheses are tested at a significance level of 0.05

 $\mathbf{H_1}$ : There will be a significant correlation between knowledge and attitude scores regarding e-health services among the elderly.

**H**<sub>2</sub>: There will be a significant association between knowledge and attitude scores regarding e-health services among the elderly.

#### MAJOR FINDINGS AND DISCUSSION

#### Section 1: Distribution of Socio-demographic Variables of Geriatric Clients

- **1. Age:** The majority 60% of participants were between the ages of 60 and 70, and 35% of participants were between the ages of 71 and 80.
- **2. Gender:** Out of 100 participants 51% of the participants were women, while 49% participants were men.

- **3. Educational qualification:** Out of 100 participants, 29% participants had no formal education, 58% participants had completed their primary education, and 13% participants had finished high school.
- **4. Type of family:** 68% of participants, are from nuclear families, and 32% are from joined families
- **5. Family income:** The majority 80 percent of the participants belonging the BPL group, and the remaining 20 percent belonging the APL category.
- **6. Current occupation:** From the 100 study samples 62% of study samples are unemployed, and 38% of study samples are employed.
- **7. Level of computer experience:** Out of 100 participants, 39% of participants have expertise in using computers at a skilled level, and the remaining 61% of participants have less experience in using computers.
- **8. Hours spent on the Internet using:** The majority of study participants, 44% of participants use the Internet, and 56% of participants not using the Internet.
- **9. Usage of e-health services:** About 72% of participants have not used e-health services and 28% of participants have used e-health services.
- **10. Source of information:** Of the 100 study participants, 81% of participants getting information through family, and the remaining 19% of participants got information from the mass media.

### Section 2: The first objective was to assess the knowledge and attitude of geriatric clients towards e-health services.

**Knowledge level:** Out of 100 geriatric study participants, 5% of respondents are having adequate knowledge, 75% of the geriatric clients are found to have moderate knowledge, and 20% have inadequate knowledge.

**Attitude level:** Out of 100 study participants 80% participants having a good attitude, 19% participants having a moderate attitude, and 1% participants having a negative attitude.

#### A similar study supported the conclusions mentioned above:

An online survey was conducted in China on 1369 older people above 50 years regarding exploring e-health literacy and technology use anxiety. The result showed that the analysis of structural models of the e-health literacy and technology use anxiety scales for adults living in Korea confirmed that all the fitness levels were stratified with slandered values. The study concluded like a multi-group confirmatory factor analysis of the smart device acceptance capacity scale of older adults living in Korea, and the average difference between the groups regarding technology-use anxiety as a factor in smart device acceptance capacity was statistically significant, the construct equivalence was verified because the morphological equivalence, measurement equivalence, and intercept equivalence were all satisfied. It was possible to compare the differences in the latent factors by the group as each latent variable and measurement variable for the men and women were equally applied to e-health literacy and technology-use anxiety. (55)

A scoping review was conducted on 4877 older adults regarding e-health literacy skills in people with chronic disease and what the measurements. The result showed that seventeen studies involving 4,877 participants were included. A majority of the studies were cross-sectional with a lack of appropriate controls. Five of the included studies were experimental, involving 758 participants. All of them reported positive effects of educational interventions on the improvements in self-reported e-Health literacy skills. However, most studies were at risk of bias. The study concluded, the findings indicate the positive relationship between e-Health literacy and various health care processes in adults with chronic diseases and highlights a need for prospective controlled studies. Promoting e-Health literacy might give better opportunities for the active involvement of people with chronic diseases in self-care and the implementation of online interventions into the existing system of care. (56)

### Section 3: The third objective was to determine the relationship between knowledge and attitude of e-health services among geriatrics.

The correlation between knowledge and attitude toward e-health services in geriatrics was found to be significant with spearman correlation coefficient (r = .260) with a moderately negative correlation at p<0.05, it shows that, as the knowledge increases the attitude of geriatric clients also increases.

# Section 4: The fourth objective was to determine the Association between knowledge and attitude scores regarding e-health services among the elderly and selected sociodemographic variables.

There is no statistically significant association between knowledge regarding e-health services among geriatrics with any of the selected demographic variables.

There is a statistically significant association between attitude to e-health services among geriatrics with selected demographic variables such as age, usage of e-health services, and source of information.

#### Similar findings from earlier studies supported the present findings:

A non-experimental cross-sectional study was conducted on 224 Czech older people by using a self-reported survey report. The study result showed that there was a significant difference between the e-Health supporters and the non-supporters as far as age and education level are concerned. Older adults, who were relatively younger (between 65 and 74 years) or/and who maintained a higher level of education, were more likely to indicate a positive response to the e-Health services. However, there was no significant difference across gender, residential condition, and household size. The study concluded like, despite the prevalence of ICT devices in older adults, there are still disparities in their use of technology and adoption of e-Health services. (57)

This chapter discussed how the findings of the current study compared to those of earlier studies which is proven to be an effective intervention to promote healthy strategies among geriatric clients.

**CHAPTER -VII** 

**CONCLUSION** 



"Research is the act of probing for accurate reliable useful information and of organising that information so that sound conclusion can be drawn"

- (Herbert Lee Williams)

#### **CONCLUSION**

"To acquire knowledge, one must study; but to acquire wisdom, one must observe."

The summary, conclusion, and recommendation are presented in this chapter.

To create an information pamphlet, the current study was done to evaluate older residents of Kolar's selected urban community areas' knowledge and attitudes toward e-health services. The knowledge and attitudes of senior people in specific Kolar urban community regions towards e-health services were evaluated using a descriptive study approach.

The study was carried out in Kolar, one of the chosen urban areas. 100 elderly residents of Kolar, one of the designated urban locations, made up the study's part. The study sample was selected using the convenience sampling method. Using a structured Knowledge Questionnaire, the facts were created from samples.

Created on the objectives of the study conclusion are presented under the following points.

- According to the study's first goal, there were three categories of the elderly's knowledge about e-health services: 5% of participants have adequate knowledge, 75% percentage has moderate knowledge, and,20% of participants have inadequate knowledge.
- According to the results of the study's second goal, attitudes towards e-health services among the elderly were categorized as three, as 80% have good attitudes.
   19% of participants have a Moderate attitude, and 1% of participants have a Negative attitude.
- 3. As per the third objective of the study findings, the correlation was found to be significant with the Spearman correlation it shows that, as knowledge increases the attitude of geriatric clients also increases.
- 4. As per the fourth objective of the study findings, knowledge and designated demographic variables were done and the result revealed that there is no statistically significant association found for any of the variables, attitude and designated demographic variables was done and result revealed that, there is a statistical association found for variables such as age (x² =4.0575, df=1, p=.043976) and usage of e-health services (x² =5.3019, df=1, p=.021302) and source of information (x² =10.3527, df=1, p=.001293) and found no significance association for remaining variables.

#### **NURSING IMPLICATIONS**

• The following sectors of the nursing profession can benefit from the study's findings.

#### **NURSING PRACTICES**

- Nurses working in both hospital and community settings should inform senior citizens about the advantages of e-health services.
- Nurses are essential to increasing elderly people's use of e-health services.

#### NURSING EDUCATION

- The foundation of knowledge is education. There are many possibilities for a nurse educator to inform seniors about e-health services.
- Encourage the nursing student nurse from the college of nursing to give a demonstration of how to utilize the e-health service app.

#### NURSING ADMINISTRATION

- Disseminating knowledge about the challenges of aging and the need for e-health services.
- Informing people about the different e-health services that are offered.

#### NURSING RESEARCH

• Nursing research is crucial for enhancing nurses' wellbeing. It not only aids nurses in expanding their knowledge but also enhances the standard of care given to society.

• This study aids nurse researchers who are conducting studies on the improvement of elderly people's health and knowledge.

#### RECOMMENDATIONS OF THE STUDY

- A comparable study can be carried out using demonstration methods, on a large sample, and in many sorts of settings.
- A control group might be used in a similar study.

#### LIMITATIONS

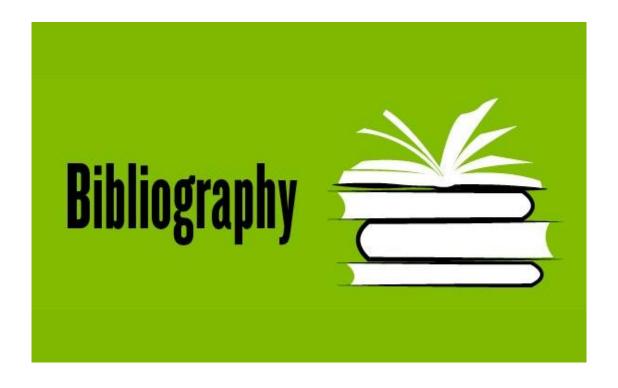
- There was a maximum sample size of 100.
- The study was restricted to simply looking at senior people's attitudes and understanding of e-health services.

#### **SUMMARY**

- The overall study analysis, consequences, limitations, and suggestions to advance understanding of e-health services are covered in this chapter.
- The aforementioned recommendations were presented to the elderly regarding their knowledge and attitude regarding e-health services based on the findings revealed and subsequent research.

#### CHAPTER-VIII

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"A book is a gift you can open and again and again"

-Garrison Keillor-

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## ANNEXURES

## ANNEXURE- I Ethical clearance Certificate



#### SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA, KOLAR - 563 103. INSTITUTIONAL ETHICS COMMITTEE

IEC 01 Format No. 02 Issue No. 01 Rev No. 01-09-2018 Date

#### Ref.:No.SDUCON/IEC/ 50 /2022

Date:28/07/2022

This is to certify that the Institutional Ethics committee of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has examined and unanimously the following projects of III Year Basic B.Sc Nursing and II year P.B.B.Sc, I Year M.Sc Nursing Students and Faculty projects for the academic year 2021-22

Number of projects B.Sc Nursing: 11 Number of projects M.Sc Nursing: 18 Number of Faculty Projects: 15

10100	Projecti - 42	
estigators	Accepted/ Not	
	accepted	

Sl. No	Name of the Topic	Guide	Investigators	Accepted/ Not accepted	Remarks
· 1.	A descriptive study to assess the knowledge regarding assistive technology for children with learning disabilities among school teachers in selected schools at kolar.	Mr. R Rajesh	Abigale Thomas Amrutha GN Ansu James Athulya CS Gayathri N Meghana V Rajeena Biju Sneha Benny Tessy Thomas Suresh (PBBSc) Arunamma (PBBSc)	Accepted	for Remaind find meeting minute for all project
	"A Descriptive Study To Assess Then Academic Stress And Self Efficacy In Relation To Study Habits Among Adolescents In Selected Pu Colleges, Kolar."		Miss. Achangel Sebastian Miss. Amrutha S Miss. Anu Johnson Miss. Ayana Joseph Miss. Husna N Miss. Merin Lenin Mr. Rakesh M P Miss. Sneha Rajmohanan	Accepted	



### SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA, KOLAR – 563 103. INSTITUTIONAL ETHICS COMMITTEE

Format No. IEC 01
Issue No. 02
Rev No. 01
Date 01-09-2018

٠.				
		Nayana Salu prasad Soumya Sunny Vishwas Gowda S V Manjula T. N		
7	"A study to assess the Impact of Dr. Zeanath Competency Based Teaching Cariena Joseph Programme on knowledge and skill regarding Nursing Care Documentation for safe patient outcomes among Nursing Staff working in Acute Health Care Facilities of R.L. Jalappa Medical Teaching Hospital Kolar. In a view to develop mobile app on Nursing Care Documentation."	Aleena Babu Anjana K S Arya Jayan Devika Anil Lisha Thomas Nikitha Peter Sandra Lukose Sruthi S Nair Yuvaraj T N Munikrishna H	Accepted	
8	A study to assess the knowledge and Mrs. Vani R attitude regarding e-health services among elderly at selected urban community areas, kolar, with a view to develop information pamphlet.	Aleena benny Anmary shiju Asha binu Diya biju Justy babu Mahima mani Praisy j Saumya roy Sruthi s suresh Narayanaswami	Accepted	
9	of health education programme regarding knowledge on respiratory allergy among farmers at selected villages of kolar taluk karnataka"		Accepted	

#### ANNEXURE - II

#### Letter Requesting permission to conduct research study

#### From,

Research students,

4<sup>th</sup> year BSc (N)

Sri Devaraj Urs College of Nursing

Tamaka Kolar - 563103

#### To,

The Medical officer.

Urban Health Center,

Kolar 563101

#### Through the guide:

The principal

Sri Devaraj Urs College of Nursing

Tamaka Kolar 563103

#### Respected Sir/Madam,

**Sub:** Requesting permission to conduct a research study in the community area.

We the undersigned 4<sup>th</sup> year BSc(N) students of Sri Devaraj Urs College of Nursing Tamaka Kolar have selected the below-mentioned topic for our research project as a partial fulfilment of the course Bachelors of Nursing.

#### Title of the topic:

# "A STUDY TO ASSESS KNOWLEDGE AND ATTITUDE REGARDING e-HEALTH SERVICES AMONG ELDERLY AT SELECTED URBAN COMMUNITY AREAS, KOLAR WITH A VEIW TO DEVELOP INFORMATION PAMPHLET"

About the above, we request you grant permission to collect data from the elderly in the community area. Further, we assure that the information collected from the elderly population will be kept confidential.

Hence, we request your good self to kindly consider for needful approval.

#### Thanking You,

#### **Enclosure:**

- 1. Synopsis
- 2. Tools
  - (a)Sociodemographic Performa
  - (b)Structured knowledge questionnaire on e-health services
  - (c)Attitude scale to assess the attitude of e-health services among elderly people.
- 3. Institutional ethical clearance letter

Yours sincerely
Mr. Narayanaswami
Miss Aleena Benny
Miss Anmary Shiju
Miss Asha Binu
Miss Diya Biju
Miss Justy Babu
Miss Mahima Mani
Miss Praisy Jnanadas
Miss Saumya Roy
Miss Sruthy S Suresh

#### From.

Research students,

4th year BSc (N)

Sri Devaraj Urs College of Nursing

Tamaka Kolar - 563103

#### To,

The Medical officer.

Urban Health Center,

Kolar 563101

#### Through the guide:

The Principal

Sri Devaraj Urs College of Nursing

Tamaka Kolar 563103

#### Respected Sir/Madam.

Sub: Requesting permission to conduct research study in the community area.

We the undersigned 4th year BSc(N) students of Sri Devaraj Urs College of Nursing Tamaka Kolar has selected the below mentioned topic for our research project as a partial fulfilment of course Bachelors of Nursing.

#### Title of the topic:

"A STUDY TO ASSESS KNOWLEDGE AND ATTITUDE REGARDING e-HEALTH SERVICES AMONG ELDERLY AT SELECTED URBAN COMMUNITY AREAS, KOLAR WITH A VEIW TO DEVELOP INFORMATION PAMPHLET"

With regard to the above, we request you to grant permission to collect data from the elderly of the community area. Further we assure that the information collected from the elderly population will be kept confidential.

Hence, we request your good self to kindly consider for needful approval.

#### Thanking You,

#### Enclosure:

- 1.Synopsis
- 2.Tools
  - (a)Sociodemographic Performa
  - (b)Structured knowledge questionnaire on e-health services
  - (c)Attitude scale to assess the attitude of the e-health services among elderly people.

Swalled to the Medical offices, Whan Healtr Centle, Kolah & a Sieguest to permit squares to collect day 3. Institutional ethical clearance letter

Date: 23/02/23

Place: Garaka, Kolat

Your sincerely

Mr Narayanaswami

Miss Aleena Benny

Miss Anmary Shiju Arm

Miss Asha Binu Osho

Miss Diya Biju

Miss Justy Babu

Miss Mahima Mani Mahang

Miss Praisy J

Miss Saumya Roy

Miss Sruthy S Suresh

Forwarded to the Principal for needful Consideration

23/02/23

#### ANNEXURE-III

#### CERTIFICATE OF STATISTICIAN

#### **CERTIFICATE FROM STATISTICIAN**

I hereby certify that I have provided statistical guidance in analysis to all 3<sup>rd</sup> year BSc(N) students, for the research study titled "A study to assess knowledge and attitude regarding e-health services among elderly at selected urban community areas, Kolar with a view to develop information pamphlet" at Sri Devaraj Urs College of Nursing Tamaka Kolar.

Place: Tamaka, Kolar

Date:

S. RAVISHANKAR

Lect./Assit. Professor.

Dopt. of Community Medicine.

Sri Dovaraj Urs Medical College.

Tamaka, Kolar-563101

#### **ANNEXURE-IV**

LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY FOR RESEARCH TOOL.

From,

Research Students

3rd Year B.Sc. (N)

Sri Devaraj Urs College of Nursing

Tamaka, Kolar

To,

Subject: Requesting for the opinion and suggestion of experts for establishing content validity of research tool.

#### Respected Sir/Madam

We the students of basic B.Sc. The nursing 3<sup>rd</sup>-year team belonging to the Dept. of Community Health Nursing has selected the below-mentioned topic for a research project for the fulfilment of the requirements of nursing research subject for a BSc(N) degree.

Title of the study

"A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING e-HEALTH SERVICES AMONG ELDERLY AT SELECTED URBAN COMMUNITY AREAS, KOLAR, WITH A VIEW TO DEVELOP INFORMATION PAMPHLET."

About the above matter, we kindly request you to validate the tool for its appropriateness and relevancy we are hereby enclosing the objectives of the study and the knowledge questionnaire, and the Likert scale for your research, we will be highly obliged and thank full for your great help. Here with we enclose,

- Statement of the Study
- Objective of the study
- Tool of the study
- Answer key of the tool

#### **Objectives of the study**

5. To assess the level of knowledge regarding e-health services among the elderly by

using a structured knowledge questionnaire.

6. To assess the attitude regarding e-health services among the elderly by using the Likert

scale.

7. To determine the correlation between knowledge and attitude regarding e-health

services.

8. To find out the association between knowledge and attitude scores regarding e-health

services among the elderly and selected socio-demographic variables.

**TOOL** 

Section A: Socio-Demographic Profile

Section B: Structured knowledge questionnaire

**Section C:** Attitude scale to assess the attitude of e-health services

We humbly request you to go through the tool and give your valuable suggestion and opinion. Kindly suggest modifications, addition, and deletions, if any, in the remark column.

Thank you,	Yours sincerely,
	Ms. Aleena Benny
	Ms. Anmary Shiju
Place:	Ms. Asha Binu
Date:	Ms Diya Biju
	Ms. Justy Babu
	Ms. Mahima Mani
	Ms. Praisy Jnanadas
	Ms. Saumya Roy

Ms. Sruthy Suresh

Mr. Narayanaswami

#### **ANNEXURE - V**

#### CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool and information pamphlet of the 8<sup>th</sup> group of 3<sup>rd</sup> year BSc(N), students of Sri Devaraj Urs College of Nursing Tamaka, Kolar, who have undertaken a research project as partial fulfilment of a Bachelor of Science in nursing degree

"A STUDY TO ASSESS KNOWLEDGE AND ATTITUDE REGARDING E-HEALTH SERVICES AMONG ELDERLY AT SELECTED URBAN COMMUNITY AREAS, KOLAR WITH A VIEW TO DEVELOP INFORMATION PAMPHLET"

Date:	Signature of validator

Place: Tamaka, Kolar

#### **ANNEXURE-VI**

#### SECTION A: SOCIO-DEMOGRAPHIC PROFILE

#### **INSTRUCTION:**

Dear participants, we request your kind cooperation in filling in the below-asked details. The answer given by you will be kept confidential. No one will know your answer. Kindly answer or place a tick mark  $(\checkmark)$  or fill in where ever necessary about you. There are no right or wrong answers.

b) APL

6. Current occupation

a) Employed

7. Level of computer/Mobile usage experience
a) No skill
b) Beginner
c) Immediate
d) Expert
8. How many hours do you spend using the internet per day
a) Not using
b) 1-3 hour
c) 4-6 hour
d) 7-9 hour
9. Are you using any e-health services. If yes specify which are the apps
a) Yes (Arogya Setu, M Fine, Any other)
b) No
10. Source of information
a) Mass media

b) Unemployed

b) Family members

# SECTION B: STRUCTURED KNOWLEDGE QUESTIONNARE

**INSTRUCTION**: Read the following items carefully. The most appropriate response from the given option and place a tick mark in the space provided. Each question carries one mark.

- 1) What do you mean by e-health services?
  - a) Electronic healthcare services
  - b) Educational health services
  - c) Emergency health care services
  - d) Electronic home care services
- 2) What is the goal of e-health?
  - a) Reducing medical errors
  - b) Providing effective means of communication
  - c) Sharing information between healthcare providers
  - d) All of the above
- 3) Which is the main services of e-health?
  - a) Online medical consultation
  - b) Occupational therapy
  - c) Athletic training
  - d) Music therapy
- 4) Which of the following are the advantages of e-health services?
  - a) Gives Sophisticated infrastructure
  - b) Improves social network
  - c) Time consuming
  - d) Provides health care more affordable & accessible.
- 5) Which age group acquire more benefit from e-health services?
  - a) Older adults
  - b) Children

c)	Adolescent
d)	Adult
6)Wh	at is the purpose of e-health services among geriatrics?
a)	Improved quality care & ease of accessibility
b)	Improves social networks
c)	Promotes business opportunities
d)	Earning money
7)In v	which ways e-health be beneficial in geriatrics?
a)	Time-consuming
b)	Over dependency
c)	Reduce mobility & traveling
d)	High cost
8)Wh	at is the importance of using e-health services among geriatrics?
a)	Social interaction
b)	Provide quick access to patient records
c)	Boosting creativity
d)	All of the above
9) Wh	at are the health benefits of geriatrics who utilize e-health services regularly?
a)	Active & Healthy Aging
b)	Unequal healthcare
c)	High cost
d)	Lack of knowledge
10)I	How are e-health services beneficial to healthcare professionals?
a)	Poor quality of information
b)	technical training
c) '	Го maintain a patient medical record
d)	Inconsistency & Inefficiency

a) Mental health
b) social health
c) Telehealth
d) Rehabilitation
12) What is the way used to convey information in electronic records?
e) Email
f) Twitter
g) Tape records
h) Survey
13) Which of the following devices are used in the delivery of e-health?
a) Typewriter
b) Television
c) Mobile/Computer
d) Fax
14) At what time e-health services are available?
a) 12 hours/day
b) Any time
c) On Working days
d) On Sundays
15) How e-health services are utilized & applied in healthcare
a) Manage, Store & Record the client's health information

b) Assess, check & document the network

d) Boosting activity

c) Plan, mail & report the status of designing

11) Which of the following belongs to e-health services?

16) Wh	nich is the main usable tool for e-health services?
a)	Electronic medical records
b)	Mobile/Laptop/Computer
c)	Paper & Book
d)	Fax writer
17) Ho	w can you learn more about Updates in e-health?
a)	Website
b)	Books
c)	Mail
d)	Letters
18) Wh	nat are the main components of e-health services specially related to geriatrics?
a)	Profile management
b)	Delivery of health information and records
c)	Business management
d)	Accessibilities, Accommodation & Activities
19)Wh	ich of the following is the barrier to e-health services
a)	Good network
b)	Lack of knowledge
c)	Adequate security
d)	Good skill
20)Wh	ich of the following app is used for e-health services among geriatric
a)	mAadhar
b)	UMANG
c)	Aykar Setu
d)	M-Fine

# SECTION-C: ATTITUDE SCALE TO ASSESS THE ATTITUDE OF THE e-HEALTH SERVICE AMONG ELDERLY PEOPLE

**INSTRUCTION:** The attitude scale consists of 12 statements. Each statement is provided with 5 points scale namely strongly agree, agree, uncertain, disagree, and strongly disagree. Please read each statement given below and indicate the response by placing a tick mark against one of the 5 points in the appropriate column.

Sl.n	STATEMEN	STRONGL	AGRE	UNCERTAI	DISAGRE	STRONGL
0	T NT	Y	E	N	E	Y
		AGREE				DISAGREE
1.	I think that e-					
	health is					
	beneficial & I					
	prefer to look					
	on the internet					
	than go to the					
	doctor.					
2.	I think that e-					
	health					
	services					
	require					
	computer					
	knowledge &					
	not suitable					
	for geriatric*					
3.	Do you think					
	that e-health					
	is a future					
	way to reduce					
	demands and					

	time			
4.	I believe that			
	the			
	availability of			
	getting			
	medical			
	reports is			
	more			
	convenient			
	through e-			
	health			
	services			
5.	Do you			
	believe that e-			
	health			
	technology			
	will help you			
	to live a			
	healthier life?			
6.	I feel that e-			
	health			
	services are			
	feasible in a			
	pandemic			
	situation			
7.	I think that			
	transportation			
	will not be			
	necessary			
	while using e-			
	health			
	services			
8.	I don't			
0.	ı uon t			

	understand			
	how to use e-			
	health			
	technology*			
9.	I think that			
	there is an			
	insecurity			
	with e-health			
	in an			
	emergency *			
10.	I feel that I			
	am not able to			
	express all my			
	health issues			
	through online			
	consultation*			

<sup>\*</sup>Indicate a negative statement

Note 1. SA – Strongly disagree, A- Agree, UC – Uncertain, DA-Disagree, SD-Strongly Disagree

2. Positive statement secures marks as SA-5 A-4, UC-3, D-2, SD-1

Negative statement secures marks as SA-1, A-2, UC-3, D-4,SD-5

# ವಿಭಾಗ ಎ: ಸಾಮಾಜಿಕ-ಜನಸಂಖ್ಯಾ ಪ್ರೊಫೈಲ್

,				
$\pi$	1.17	7.		١.
N	103	ωı	vc	ι.

ಆತ್ಮೀಯ ಭಾಗವಹಿಸುವವರೇ, ಕೆಳಗೆ ಕೇಳಲಾದ ವಿವರಗಳನ್ನು ಭರ್ತಿ ಮಾಡಲು ನಿಮ್ಮ ರೀತಿಯ ಸಹಕಾರವನ್ನು ನಾವು ಕೋರುತ್ತೇವೆ. ನೀವು ನೀಡಿದ ಉತ್ತರವನ್ನು ಗೌಪ್ಯವಾಗಿಡಲಾಗುವುದು. ನಿಮ್ಮ ಉತ್ತರ ಯಾರಿಗೂ ತಿಳಿಯುವುದಿಲ್ಲ. ದಯವಿಟ್ಟು ಉತ್ತರಿಸಿ ಅಥವಾ ಟಿಕ್ ಮಾರ್ಕ್ (🏿) ಇರಿಸಿ ಅಥವಾ ನಿಮಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅಗತ್ಯವಿರುವಲ್ಲಿ ಭರ್ತಿ ಮಾಡಿ. ಸರಿ ಅಥವಾ ತಪ್ಪು ಉತ್ತರಗಳಿಲ್ಲ.

이어 선생님이 아일이가 하면서 그렇게 되었다. 이 교리는 사람들은 바다가 되었다면 살려지 않았다.			
ಉತ್ತರಗಳಿಲ್ಲ.			
1. ವರ್ಷಗಳಲ್ಲಿ ವಯಸ್ಸು			
2. ಲಿಂಗ			
ಎ) ಪುರುಷ		(	)
ಬಿ) ಹೆಣ್ಣು		(	)
3. ಶೈಕ್ಷಣಿಕ ಅರ್ಹತೆ			
ಎ) ಔಪಚಾರಿಕ ಶಿಕ್ಷಣವಿಲ್ಲ		(	)
ಬಿ) ಪ್ರಾಥಮಿಕ ಶಿಕ್ಷಣ	1,	(	)
ಸಿ) ಹೈಯರ್ ಸಕೆಂಡರಿ		(	)
ಡಿ) ಪದವೀಧರ		(	)
ಇ) ಸ್ನಾತಕೋತ್ತರ		(	)
4. ಕುಟುಂಬದ ಪ್ರಕಾರ			
a) ವಿಭಕ್ತ ಕುಟುಂಬ		(	)
ಬಿ) ಅವಿಭಕ್ತ ಕುಟುಂಬ		. (	),
<u>වා පටස්ජ භයාංස</u>		(	)
5. ಕುಟುಂಬದ ಆದಾಯ			
ಎ) ಬಿಪಿಎಲ್		(	)
<b>ಬಿ) ಎಪಿಎ</b> ಲ್ .		(	)
6. ಪ್ರಸ್ತುತ ಉದ್ಯೋಗ			
ಎ) ಉದ್ಯೋಗಿ		(	)
ಬಿ) ನಿರುದ್ಯೋಗಿ		(	)
7. ಕಂಪ್ಯೂಟರ್/ಮೊಬೈಲ್ ಬಳಕೆಯ ಅನುಭವದ ಮಟ್ಟ			
ಎ) ಕೌಶಲ್ಯವಿಲ್ಲ		(	)
ಬಿ) ಹರಿಕಾರ		(	)
ಸಿ) ತಕ್ಷಣದ		(	)
යි) <del>ತ</del> ಜ್ಞ		(	)

8. ನೀವು ದಿನಕ್ಕೆ ಎಷ್ಟು ಗಂಟೆಗಳನ್ನು ಇಂಟರ್ನೆಟ್ ಬಳಸುತ್ತಿದ್ದೀರಿ			
ಎ) ಬಳಸುತ್ತಿಲ್ಲ		(	)
ಬಿ) 1-3 ಗಂಟೆ		(	)
ಸಿ) 4-6 ಗಂಟೆ		(	)
ಡಿ) 7-9 ಗಂಚೆ			
9.ನೀವು ಯಾವುದೇ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳನ್ನು ಬಳಸುತ್ತಿರುವಿರಾ? ಹೌದು ಎಂದಾದರೆ	ಯಾವ ಅಪ್ಲಿಕೇಶನ್	ಗಳು ಎಂಬು	ದನ್ನು
ನಿರ್ದಿಷ್ಟಪಡಿಸಿ			
ಎ) ಹೌದು (ಆರೋಗ್ಯ ಸೇತು, ಎಂ ಫೈನ್, ಇತರೆ ಯಾವುದೇ		(	)
<b>ಬಿ)</b>		(	)
10.ಮಾಹಿತಿ ಮೂಲ			
a) ಸಮೂಹ ಮಾಧ್ಯಮ		(	)
ಬಿ) ಕು			
ವಿಭಾಗ ಬಿ			
<b>ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳ</b> ಸೂಚನ: ಕಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ತ	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳಿ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು?	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗೆ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳಿ ಸೂಚನೆ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾವಳಿ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಂ	ತ್ತು ಒದಗೆ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳಿಸುವನೆ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗೆ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳಿಸುವನೆ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾವಳಿ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು ಡಿ) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಹೋಮ್ ಕೇರ್ ಸೇವೆಗಳು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾವಳಿ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು ಡಿ) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಹೋಮ್ ಕೇರ್ ಸೇವೆಗಳು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳ್ಳ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು ಡಿ) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಹೋಮ್ ಕೇರ್ ಸೇವೆಗಳು 2) ಇ-ಆರೋಗ್ಯದ ಗುರಿ ಏನು? a) ವೈದ್ಯಕೀಯ ದೋಷಗಳನ್ನು ಕಡಿಮೆ ಮಾಡುವುದು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗೆ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳ್ಳ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು ಡಿ) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಹೋಮ್ ಕೇರ್ ಸೇವೆಗಳು 2) ಇ-ಆರೋಗ್ಯದ ಗುರಿ ಏನು? a) ವೈದ್ಯಕೀಯ ದೋಷಗಳನ್ನು ಕಡಿಮೆ ಮಾಡುವುದು ಬಿ) ಸಂವಹನದ ಪರಿಣಾಮಕಾರಿ ಸಾಧನಗಳನ್ನು ಒದಗಿಸುವುದು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
ರಚನಾತ್ಮಕ ಜ್ಞಾನ ಪ್ರಶ್ನಾ ವಳಿ ಸೂಚನ: ಕೆಳಗಿನ ಅಂಶಗಳನ್ನು ಎಚ್ಚರಿಕೆಯಿಂದ ಓದಿ. ನೀಡಿರುವ ಆಯ್ಕೆಯಿಂದ ಅತ್ಯ ಜಾಗದಲ್ಲಿ ಟೆಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸಿ. ಪ್ರತಿ ಪ್ರಶ್ನೆಯೂ ಒಂದು ಅಂಕವನ್ನು ಹೊಂದೀ 1) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಅರ್ಥವೇನು? a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಬಿ) ಶೈಕ್ಷಣಿಕ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಸಿ) ತುರ್ತು ಆರೋಗ್ಯ ಸೇವೆಗಳು ಡಿ) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಹೋಮ್ ಕೇರ್ ಸೇವೆಗಳು 2) ಇ-ಆರೋಗ್ಯದ ಗುರಿ ಏನು? a) ವೈದ್ಯಕೀಯ ದೋಷಗಳನ್ನು ಕಡಿಮೆ ಮಾಡುವುದು ಬಿ) ಸಂವಹನದ ಪರಿಣಾಮಕಾರಿ ಸಾಧನಗಳನ್ನು ಒದಗಿಸುವುದು ಸಿ) ಆರೋಗ್ಯ ಪೂರೈಕೆದಾರರ ನಡುವೆ ಮಾಹಿತಿಯನ್ನು ಹಂಚಿಕೊಳ್ಳುವುದು	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ
	ಂತ ಸೂಕ್ತವಾದ ಪ್ರಸ	ತಿಕ್ರಿಯೆ ಮಾ	ತ್ತು ಒದಗ

- ಬಿ) ಔದ್ಯೋಗಿಕ ಚೆಕಿತ್ಸ
- ಸಿ) ಅಥ್ಲೆಟಿಕ್ ತರಬೇತಿ
- ಡಿ) ಸಂಗೀತ ಚಿಕಿತ್ಸೆ
- 4) ಈ ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಪ್ರಯೋಜನಗಳು ಯಾವುವು?
  - a) ಅತ್ಯಾಧುನಿಕ ಮೂಲಸೌಕರ್ಯವನ್ನು ನೀಡುತ್ತದೆ
  - ಬಿ) ಸಾಮಾಜಿಕ ನೆಟ್ವರ್ಕ್ ಅನ್ನು ಸುಧಾರಿಸುತ್ತದೆ
  - ಸಿ) ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ
  - ಡಿ) ಹೆಚ್ಚು ಕೈಗೆಟುಕುವ ಮತ್ತು ಪ್ರವೇಶಿಸಬಹುದಾದ ಆರೋಗ್ಯ ರಕ್ಷಣೆಯನ್ನು ಒದಗಿಸುತ್ತದೆ.
- 5) ಇ-ಹೆಲ್ಡ್ ಸೇವೆಗಳಿಂದ ಯಾವ ವಯಸ್ಸಿನವರು ಹೆಚ್ಚು ಪ್ರಯೋಜನ ಪಡೆಯುತ್ತಾರೆ?
- ಎ) ಹಿರಿಯ ವಯಸ್ಕರು
- ಬಿ) ಮಕ್ಕಳು
- ಸಿ) ಹದಿಹರೆಯದವರು
- d) ವಯಸ್ಕ
- 6) ಜೆರಿಯಾಟ್ರಿಕ್ಸ್ ನಲ್ಲಿ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಉದ್ದೇಶವೇನು?
- a) ಸುಧಾರಿತ ಗುಣಮಟ್ಟದ ಆರೈಕೆ ಮತ್ತು ಸುಲಭ ಪ್ರವೇಶ
- ಬಿ) ಸಾಮಾಜಿಕ ನೆಟ್ವರ್ಕ್ಗಳನ್ನು ಸುಧಾರಿಸುತ್ತದೆ
- ಸಿ) ವ್ಯಾಪಾರ ಅವಕಾಶಗಳನ್ನು ಉತ್ತೇಜಿಸುತ್ತದೆ
- d) ಹಣ ಗಳಿಸುವುದು
- 7) ಜೆರಿಯಾಟ್ರಿಕ್ಸ್ ನಲ್ಲಿ ಇ-ಹೆಲ್ತ್ ಯಾವ ರೀತಿಯಲ್ಲಿ ಪ್ರಯೋಜನಕಾರಿಯಾಗಿದೆ?
- ಎ) ಸಮಯ ತೆಗೆದುಕೊಳ್ಳುತ್ತದೆ
- ಬಿ) ಅತಿಯಾದ ಅವಲಂಬನೆ
- ಸಿ) ಚಲನಶೀಲತೆ ಮತ್ತು ಪ್ರಯಾಣವನ್ನು ಕಡಿಮೆ ಮಾಡುತ್ತ್ವದ
- ಡಿ) ಹೆಚ್ಚಿನ ವೆಚ್ಚ
- 8) ಜೆರಿಯಾಟ್ರಿಕ್ಸ್ ನಲ್ಲಿ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳನ್ನು ಬಳಸುವ ಪ್ರಾಮುಖ್ಯತೆ ಏನು?
- ಎ) ಸಾಮಾಜಿಕ ಸಂವಹನ
- ಬಿ) ರೋಗಿಯ ದಾಖಲೆಗಳಿಗೆ ತ್ವರಿತ ಪ್ರವೇಶವನ್ನು ಒದಗಿಸಿ
- ಸಿ) ಸೃಜನಶೀಲತೆಯನ್ನು ಹೆಚ್ಚೆಸುವುದು
- d) ಮೇಲಿನ ಎಲ್ಲಾ

9) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳನ್ನು ನಿಯಮಿತವಾಗಿ ಬಳಸಿಕೊಳ್ಳುವ ಜೆರಿಯಾಟ್ರಿಕ್ಸ್ ನ ಆರೋಗ್ಯ ಪ್ರಯೋಜನಗಳು ಯಾವುವು?	
ಎ) ಸಕ್ರಿಯ ಮತ್ತು ಆರೋಗ್ಯಕರ ವಯಸ್ಸಾದ	
ಬಿ) ಅಸಮಾನ ಆರೋಗ್ಯ	
ಸಿ) ಹೆಚ್ಚೆನ ವೆಚ್ಚ	
ಡಿ) ಜ್ಞಾನದ ಕೊರತ	
10) ಆರೋಗ್ಯ ವೃತ್ತಿಪರರಿಗೆ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳು ಹೇಗೆ ಪ್ರಯೋಜನಕಾರಿ?	
ಎ) ಮಾಹಿತಿಯ ಕಳಪೆ ಗುಣಮಟ್ಟ	
ಬಿ) ತಾಂತ್ರಿಕ ತರಬೇತಿ	
ಸಿ) ರೋಗಿಯ ವೈದ್ಯಕೀಯ ದಾಖಲೆಯನ್ನು ನಿರ್ವಹಿಸಲು	
ಡಿ) ಅಸಂಗತತ ಮತ್ತು ಅಸಮರ್ಥತ	
11) ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದು ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳಿಗೆ ಸೇರಿದೆ?	
ಎ) ಮಾನಸಿಕ ಆರೋಗ್ಯ	
ಬಿ) ಸಾಮಾಜಿಕ ಆರೋಗ್ಯ	
ಸಿ) ಚೆಲಿಹೆಲ್ತ್	
ಡಿ) ಪುನರ್ವಸತಿ	
wy cylowit too	
12) ವಿದ್ಯುನ್ಮಾನ ದಾಖಲೆಯಲ್ಲಿ ಮಾಹಿತಿಯನ್ನು ತಿಳಿಸಲು ಬಳಸುವ ಮಾರ್ಗ ಯಾವುದು?	
ಇ) ಇಮೇಲ್	
f)	
g) ಟೇಪ್ ದಾಖಲೆಗಳು	
h) ಸಮೀಕ್ಷ	
13) ಇ-ಹೆಲ್ತ್ ವಿತರಣೆಯಲ್ಲಿ ಕೆಳಗಿನ ಯಾವ ಸಾಧನಗಳನ್ನು ಬಳಸಲಾಗುತ್ತದೆ?	
ಎ) ಟೈಪ್ ರೈಟರ್	
ಬಿ) ದೂರದರ್ಶನ	
ಸಿ) ಮೊಬೈಲ್/ಕಂಪ್ಯೂಟರ್	
ಡಿ) ಫ್ಯಾಕ್ಸ್	
14) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳು ಯಾವ ಸಮಯದಲ್ಲಿ ಲಭ್ಯವಿದೆ?	
ಎ) 12 ಗಂಟೆಗಳು / ದಿನ	
ಬಿ) ಯಾವುದೇ ಸಮಯದಲ್ಲಿ	

- ಸಿ) ಕೆಲಸದ ದಿನಗಳಲ್ಲಿ
- ಡಿ) ಭಾನುವಾರದಂದು
- 15) ಆರೋಗ್ಯ ರಕ್ಷಣೆಯಲ್ಲಿ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳನ್ನು ಹೇಗೆ ಬಳಸಿಕೊಳ್ಳಲಾಗುತ್ತದೆ ಮತ್ತು ಅನ್ವಯಿಸಲಾಗುತ್ತದೆ
- a) ಕ್ಲೈಂಟ್ ಆರೋಗ್ಯ ಮಾಹಿತಿಯನ್ನು ನಿರ್ವಹಿಸಿ, ಸಂಗ್ರಹಿಸಿ ಮತ್ತು ರೆಕಾರ್ಡ್ ಮಾಡಿ
- ಬಿ) ನೆಟ್ವರ್ಕ್ ಅನ್ನು ಮೌಲ್ಯಮಾಪನ ಮಾಡಿ, ಪರಿಶೀಲಿಸಿ ಮತ್ತು ದಾಖಲಿಸಿ
- ಸಿ) ವಿನ್ಯಾಸದ ಸ್ಥಿತಿಯನ್ನು ಯೋಜಿಸಿ, ಮೇಲ್ ಮಾಡಿ ಮತ್ತು ವರದಿ ಮಾಡಿ
- ಡಿ) ಚಟುವಟಿಕೆಯನ್ನು ಹೆಚ್ಚೆಸುವುದು
- 16) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳಿಗೆ ಬಳಸಬಹುದಾದ ಮುಖ್ಯ ಸಾಧನ ಯಾವುದು?
- a) ಎಲೆಕ್ಟ್ರಾನಿಕ್ ವೈದ್ಯಕೀಯ ದಾಖಲೆಗಳು
- ಬಿ) ಮೊಬೈಲ್/ಲ್ಯಾಪ್ಟಾಪ್/ಕಂಪ್ಯೂಟರ್
- ಸಿ) ಕಾಗದ ಮತ್ತು ಪುಸ್ತಕ
- d) ಫ್ಯಾಕ್ಸ್ ಬರಹಗಾರ
- 17) ಇ-ಹಲ್ತ್ ನ ಅಪ್ ಡೇಟ್ ಗಳ ಕುರಿತು ನೀವು ಹೇಗೆ ಇನ್ನಷ್ಟು ತಿಳಿದುಕೊಳ್ಳಬಹುದು?
- a) ವೆಬ್ಸೈಟ್
- ಬಿ) ಪುಸ್ತಕಗಳು
- ಸಿ) ಮೇಲ್
- ಡಿ) ಪತ್ರಗಳು
- 18) ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ಮುಖ್ಯ ಅಂಶಗಳು ವಿಶೇಷವಾಗಿ ವೃದ್ಧಾಪ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿವೆ?
- ಎ) ಪ್ರೊಫೈಲ್ ನಿರ್ವಹಣೆ
- ಬಿ) ಆರೋಗ್ಯ ಮಾಹಿತಿ ಮತ್ತು ದಾಖಲೆಗಳ ವಿತರಣೆ
- ಸಿ) ವ್ಯಾಪಾರ ನಿರ್ವಹಣೆ
- ಡಿ) ಪ್ರವೇಶಗಳು, ವಸತಿ ಮತ್ತು ಚಟುವಟಿಕೆಗಳು
- 19) ಕೆಳಗಿನವುಗಳಲ್ಲಿ ಯಾವುದು ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳ ತಡೆಗೋಡೆಯಾಗಿದೆ
  - ಎ) ಉತ್ತಮ ನೆಚ್ವರ್ಕ್
  - ಬಿ) ಜ್ಞಾನದ ಕೊರತೆ
  - ಸಿ) ಸಾಕಷ್ಟು ಭದ್ರತೆ
  - ಡಿ) ಉತ್ತಮ ಕೌಶಲ್ಯ

20)ಪರಿಯಾಟ್ರೆಕ್ಗಳಲ್ಲಿ ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳಿಗೆ ಕೆಳಗಿನ ಯಾವ ಅಪ್ಲಿಕೇಶನ್ ಅನ್ನು ಬಳಸಲಾಗುತ್ತದೆ

- a) mAadhar
- ಬಿ) ಉಮಂಗ್
- ಸಿ) ಆಯ್ಕರ್ ಸೇತು
- (d) 20-03 N°

#### ವಿಭಾಗ-ಸಿ

ವಯಸ್ಸಾದ ಜನರಲ್ಲಿ ಇ-ಆರೋಗ್ಯ ಸೇವೆಯ ಮನೋಭಾವವನ್ನು ನಿರ್ಣಯಿಸಲು ಧೋರಣೆಯ ಪ್ರಮಾಣ ಸೂಚನೆ: ವರ್ತನೆ ಪ್ರಮಾಣವು 12 ಹೇಳಿಕೆಗಳನ್ನು ಒಳಗೊಂಡಿದೆ. ಪ್ರತಿ ಹೇಳಿಕೆಗೆ 5 ಅಂಕಗಳ ಸ್ಕೇಲ್ ಅನ್ನು ಒದಗಿಸಲಾಗಿದೆ ಅವುಗಳೆಂದರೆ ಬಲವಾಗಿ ಒಪ್ಪುತ್ತೀರಿ, ಒಪ್ಪುತ್ತೀರಿ, ಅನಿಶ್ಚಿತತೆ, ಒಪ್ಪುವುದಿಲ್ಲ ಮತ್ತು ಬಲವಾಗಿ ಒಪ್ಪುವುದಿಲ್ಲ. ದಯವಿಬ್ಬು ಕೆಳಗೆ ನೀಡಲಾದ ಪ್ರತಿ ಹೇಳಿಕೆಯನ್ನು ಓದಿ ಮತ್ತು ಸೂಕ್ತ ಕಾಲಮ್ ನಲ್ಲಿ 5 ಪಾಯಿಂಟ್ ಗಳಲ್ಲಿ ಒಂದರ ವಿರುದ್ಧ ಟಿಕ್ ಮಾರ್ಕ್ ಅನ್ನು ಇರಿಸುವ ಮೂಲಕ ಪ್ರತಿಕ್ರಿಯೆಯನ್ನು ಸೂಚಿಸಿ.

SI. No.	STATEME NT	ದೃಢವಾಗಿ ಒಪ್ಪುತ್ತೇನೆ	ಒಪ್ಪುತ್ತೇನೆ	ಅನಿಶ್ಚಿತವಾಗಿ	ಅಸಮ್ಮತಿ ದೃಢವಾಗಿ	ಒಪ್ಪುವುದಿಲ್ಲ
1	ಇ-ಹೆಲ್ತ್ ಪ್ರಯೋಜನಕಾರಿ ಎಂದು ನಾನು ಭಾವಿಸುತ್ತೇನೆ ಮತ್ತು ನಾನು ವೈದ್ಯರ ಬಳಿಗೆ ಹೋಗುವುದಕ್ಕಿಂತ ಇಂಟರ್ನೆಟ್ ನಲ್ಲಿ ನೋಡಲು ಬಯಸುತ್ತೇನೆ.					
2	ಇ-ಹೆಲ್ತ್ ಸೇವೆಗಳಿಗೆ ಕಂಪ್ಯೂಟರ್ ಜ್ಞಾನದ ಅಗತ್ಯವಿದೆ ಮತ್ತು ವಯಸ್ಕಾದವರಿಗೆ ಸೂಕ್ತವಲ್ಲ ಎಂದು ನಾನು ಭಾವಿಸುತ್ತೇನೆ*					
3.	ಬೇಡಿಕೆಗಳು ಮತ್ತು ಸಮಯವನ್ನು ಕಡಿಮೆ ಮಾಡಲು ಇ ಆರೋಗ್ಯವು ಭವಿಷ್ಯದ ಮಾರ್ಗವಾಗಿದೆ ಎಂದು ನೀವು ಭಾವಿಸುತ್ತೀರಾ					
4	ವೈದ್ಯಕೀಯ ವರದಿಯನ್ನು ಪಡೆಯುವ ಲಭ್ಯತೆಯು ಇ ಆರೋಗ್ಯ ಸೇವೆಗಳ ಮೂಲಕ ಹೆಚ್ಚು ಅನುಕೂಲಕರವಾಗಿದೆ ಎಂದು ನಾನು ನಂಬುತ್ತೇನೆ					
5	ಇ ಆರೋಗ್ಯ ತಂತ್ರಜ್ಞಾನವು ಆರೋಗ್ಯಕರ ಜೀವನವನ್ನು ನಡಸಲು ನಿಮಗೆ ಸಹಾಯ ಮಾಡುತ್ತದೆ ಎಂದು ನೀವು ನಂಬುತ್ತೀರಾ?					
6	ಸಾಂಕ್ರಾಮಿಕ ಪರಿಸ್ಥಿತಿಯಲ್ಲಿ ಇ ಆರೋಗ್ಯ ಸೇವೆಗಳು ಕಾರ್ಯಸಾಧ್ಯವೆಂದು ನಾನು ಭಾವಿಸುತ್ತೇನೆ					

7	ಇ ಆರೋಗ್ಯ ಸೇವೆಗಳನ್ನು ಬಳಸುವಾಗ ಸಾರಿಗೆ ಅಗತ್ಯವಿರುವುದಿಲ್ಲ ಎಂದು ನಾನು ಭಾವಿಸುತ್ತೇನೆ			
8	ಇ-ಹೆಲ್ತ್ ತಂತ್ರಜ್ಞಾನವನ್ನು ಹೇಗೆ ಬಳಸುವುದು ಎಂದು ನನಗೆ ನಿಜವಾಗಿಯೂ ಅರ್ಥವಾಗುತ್ತಿಲ್ಲ			
9	ತುರ್ತು ಪರಿಸ್ಥಿತಿಯಲ್ಲಿ ಇ-ಹಲ್ತ್ ನೊಂದಿಗೆ ಅಭದ್ರತೆ ಇದೆ ಎಂದು ನಾನು ಭಾವಿಸುತ್ತೇನೆ			
10	ಆನ್ಲೈನ್ ಸಮಾಲೋಚನೆಯ ಮೂಲಕ ನನ್ನ ಎಲ್ಲಾ ಆರೋಗ್ಯ ಸಮಸ್ಯೆಗಳನ್ನು ವ್ಯಕ್ತಪಡಿಸಲು ನನಗೆ ಸಾಧ್ಯವಾಗುತ್ತಿಲ್ಲ ಎಂದು ನಾನು ಭಾವಿಸುತ್ತೇನೆ			-

#### ಋಣಾತ್ಮಕ ಹೇಳಿಕೆಯನ್ನು ಸೂಚಿಸಿ

ಗಮನಿಸಿ 1. SA - ಬಲವಾಗಿ ಒಪ್ಪುವುದಿಲ್ಲ, A- ಒಪ್ಪಿಗೆ, UC - ಅನಿಶ್ಚಿತ, DA-ಅಸಮ್ಮತಿ, SD- ಬಲವಾಗಿ ಒಪ್ಪುವುದಿಲ್ಲ

2. ಧನಾತ್ಮಕ ಹೇಳಿಕೆಯು SA-5 A-4, UC-3, D-2 ,SD-1 ನಂತೆ ಅಂಕಗಳನ್ನು ಭದ್ರಪಡಿಸುತ್ತದೆ ಖುಷಾತ್ಮಕ ಹೇಳಿಕೆಯು SA-1, A-2, UC-3, D-4, SD-5 ರಂತೆ ಅಂಕಗಳನ್ನು ಭದ್ರಪಡಿಸುತ್ತದೆ

### **ANNEXURE -VII**

### LIST VALIDATORS

1.Dr. Lavanya Subhashini.
HOD, Dept. Of Paediatric Nursing
SDUCON
2. Dr. Malathi K V
HOD, Dept of CHN
SDUCON
3. Prof.Punitha
HOD, Dept of OBG
SDUCON
4.Prof.Jairakini Aruna
HOD, Dept of Psychiatric Nursing
SDUCON
5. Prof.Mary Minerva
Dept. Of CHN
SDUCON

6. Mr. Rajesh R

Dept of MHN

**SDUCON** 

7. Mrs. Gayathri K V

Asso.Prof. Dept of OBG

SDUCON

8.Mrs.Sumana Yesupriya

Asso.Prof. Of CHN

**SDUCON** 

# ANNEXURE - VIII FORMULA USED

# Chi-Square (x²) Formula

$$\chi^2 = \sum \frac{(O-E)}{E}$$

O =The frequency observed

E= The frequency expected

 $\Sigma$ =The 'sum of

#### ANNEXURE- IX

# CERTIFICATE OF KANNADA EDITING. TO WHOM EVER IT MAY CONCERN.

This is to certify that Mr. Narayanaswami, Ms. Aleena Benny, Ms. Anmary Shiju, Ms. Asha Binu, Ms. Diya Biju, Ms. Justy Babu, Ms. Mahima Mani, Ms. Praisy J, Ms. Saumya Roy, Ms. Sruthi S Suresh, 3<sup>rd</sup> year BSc(N) of Sri Devaraj Urs College Nursing, Tamaka, Kolar has done a dissertation study interest "A study to assess knowledge and attitude regarding e-health services among elderly at selected urban community areas, Kolar with view to develop information pamphlet".

This study was edited for kannada language appropriateness by:

Date:

Place: Tamaka, Kolar

र. ए. ६. अ. कार्यात कर अ. १. ६. अ. कार्यात कर Signature

#### **ANNEXURE-** X

# CERTIFICATE OF ENGLISH EDITING TO WHOM SO EVER IT MAY CONCERN

This is to certify that, Mr. Narayanaswami, Ms. Aleena Benny, Ms. Anmary Shiju, Ms. Asha Binu, Ms. Diya Biju, Ms. Justy Babu, Ms. Mahima Mani, Ms. Praisy Jnanadas, Ms. Saumya Roy, Ms. Sruthi S Suresh, Kolar has done a Research study entitled "A study to assess knowledge and attitude regarding e-health services among elderly at selected urban community areas, Kolar with view to develop information pamphlet".

The study was edited for English Language appropriateness by,

Date:

Place:

Signature

R : Julappa Central School

Mitakana tialli

Tamuna Kolar 563102

## ANNEXURE-XI

## MASTER SHEETS

### SOCIODEMOGRAPHIC VARIABLES

60			of family					you	
40			family					-	
60								using	
60						Computer	Hours	e	Source of
<i>6</i> 0		Qualification		Income	Occupation	experience	spent	health	information
60	В	b	a	a	b	b	b	b	b
76	A	c	a	a	b	b	b	a	a
70	В	b	a	a	a	b	b	b	b
73	A	b	a	a	b	b	b	b	b
70	a	c	a	a	a	a	a	b	b
64	a	b	a	a	a	b	b	a	b
73	a	b	a	a	b	b	b	b	b
62	b	c	b	a	b	C	b	a	b
68	a	b	b	b	b	b	b	b	b
63	b	b	b	a	b	b	b	b	b
60	a	c	a	a	b	b	b	a	b
70	a	b	b	b	b	b	a	a	b
68	a	b	a	b	b	b	a	a	b
72	a	b	b	a	a	b	b	a	b
70	b	b	b	b	a	b	a	b	b
69	a	c	a	b	b	b	a	b	b
74	b	b	a	b	b	b	a	a	b
60	b	a	a	a	b	d	a	b	b
61	b	b	a	a	b	a	a	a	b
65	b	b	a	a	b	a	a	b	b
69	b	b	a	a	b	a	b	b	b
70	b	b	b	b	a	c	a	b	b
74	b	c	a	a	b	a	a	b	b
60	a	a	b	a	a	b	b	b	b
80	a	a	a	a	b	a	a	b	b
76	b	b	a	a	b	a	a	a	b
80	b	a	a	a	b	a	a	b	a
68	a	e	b	a	a	d	b	a	a
85	a	b	a	b	a	a	a	b	b
74	a	c	a	a	b	b	a	a	a
60	a	d	a	a	b	c	b	b	a
62	a	a	a	a	a	a	a	b	b
70	b	b	b	a	b	b	c	a	b
64	b	b	a	a	b	b	a	b	b
72	a	a	b	a	a	b	a	a	b
68	b	b	a	a	b	d	a	b	b
70	a	С	a	b	b	c	a	a	b
68	b	b	b	a	b	b	b	b	b

62		h	h	h		h		h	h
62	a	b	b	b	a	b	a	b	b
72	a	<u>a</u>	a	a	b	С	С	a	a
60	b	b	a	a	a	d	a	b	a
65	a	b	a	a	b	a	b	b	b
68	b	b	a	b	a	d	b	b	a
66	a	С	a	a	b	С	b	a	b
70	b	b	a	a	b	a	a	b	b
68	a	b	a	a	a	b	b	b	a
70	b	b	b	a	b	С	a	b	b
68	a	b	a	a	a	b	b	b	b
67	a	a	a	a	b	b	b	b	b
72	b	b	a	a	a	b	b	b	b
69	a	b	a	a	b	b	b	b	b
65	a	b	a	a	b	b	b	b	a
68	a	b	b	a	a	b	b	b	b
73	b	a	a	a	b	a	a	b	b
66	a	b	a	b	b	b	С	b	b
61	a	b	a	a	a	b	b	b	b
73	b	a	a	a	b	a	a	b	a
64	a	b	a	a	b	b	a	b	b
50	b	b	a	a	b	a	a	b	b
74	b	a	b	a	b	a	a	b	b
65	a	b	a	a	a	a	b	b	b
78	b	a	b	a	a	a	a	b	b
60	a	b	b	a	b	b	a	b	b
64	a	d	b	b	a	b	b	b	b
65	a	a	a	a	a	a	a	b	b
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80	b	b	b	a	b	a	a	b	b
72	b	a	b	a	b	a	a	b	b
65	b	b	b	b	a	a	a	b	b
85	a	a	b	a	b	b	a	b	b
60	b	b	b	a	b	a	a	b	b
63	b	b	a	a	b	b	a	b	b
70	a	a	b	a	b	a	a	b	b
66	a	b	b	a	b	a	a	b	b
69	b	b	a	a	a	a	a	b	b
75	a	b	b	a	b	a	a	b	b
74	a	a	a	a	b	b	a	b	b
63	b	a	a	a	a	a	a	b	b
78	a	b	a	a	b	a	a	b	b
75	b	a	a	a	b	a	a	b	b
85	b	b	b	b	b	b	b	b	a
65	a	a	a	a	b	a	a	b	b
70	b	a a	a	a	b	a	a		a
80	b	b	b		b	c a		a	
80				a b	b	b	a b	a	a
	a	a	a					a	a
72	b	С	a	a	a	b	b	a	a

60	b	b	a	a	a	a	a	b	b
65	a	a	b	a	a	b	a	a	b
85	b	b	a	a	a	a	a	b	b
77	b	b	a	a	a	b	b	a	b
70	b	a	a	b	b	b	c	a	a
67	b	a	a	a	a	a	b	b	b
60	b	b	a	a	a	a	a	b	a
74	b	b	a	a	a	b	a	a	b
65	b	b	b	b	b	С	c	a	b
70	a	a	a	a	a	a	a	b	b
78	a	b	a	a	b	b	b	b	b
84	b	b	a	b	a	b	b	a	b
79	b	a	a	b	b	b	b	a	a
67	b	a	a	a	a	a	b	b	b

# KNOWLEDGE QUESTIONNAIRE

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20 T
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0	1	0	0	0	0	0	0	1	0	0	1	1	1	0	1	0	1	1	0
1	0	0	0	1	0	0	1	1	1	0	1	1	1	0	1	0	1	1	1
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1	1	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0
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1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1
1	1	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	0	0	0
1	1	1	0	1	0	0	1	0	0	1	1	1	1	0	1	1	1	0	1
0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	1	1	1	1	0
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0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	
1	0	0	0	0	0	1	0	1	1	0	1	1	0	0	0	1	0	1	0
0	1	1	0	0	1	1	0	1	1	1	0	0	1	0	1	1	0	0	1
0	0	1	0	0	0	0	1	0	1	1	1	0	0	0	1	0	0	0	1
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1	0	1	1	1	0	0	1	0	1	0	1	0	1	0	1	1	1	0	0
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1	1	0	0	1	1	1	0	0	1	1	0	0	0	1	1	1	1	1	0
0	1	0	1	1	1	0	1	0	1	0	1	1	1	1	0	1	0	0	1
1	1	1	1	0	0	1	1	1	0	0	1	1	0	0	1	1	0	1	1
1	1	1	0	1	1	0	1	0	1	1	0	1	0	0	1	0	1	0	0
0	1	0	1	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	0
1	0	1	1	0	1	1	0	1	1	1	0	1	0	1	1	0	0	0	1
1	0	1	1	0	1	1	1	1	1	0	1	0	1	1	0	1	0	1	
1	0	1	0	0	0	1	1	0	1	1	0	0	0	0	0	0	1	0	0
1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
0	0	1	0	0	0	0	1	1	1	0	1	0	0	1	1	0	1	1	0
0	0	0	1	1	0	0	1	1	0	0	1	0	1	0	1	1	0	0	0
0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	1	1	1	0	0
1	1	0	1	1	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0
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0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	1	1	0	0	0
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0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	1	1	0
0	0	1	0	0	0	0	0	1	0	0	0	1	1	0	1	0	1	0	0
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0	1	1	0	0	0	0	1	0	1	0	1	0	1	0	1	1	0	0	0
1	1	0	0	1	0	1	0	1	0	1	1	0	1	0	1	0	1	1	1
1	0	1	0	0	1	0	1	0	0	0	1	1	0	1	0	0	0	0	1
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1     0     0     1     0     0     1     0     0     1     0     0     1     0     0     1     0     0     1     1     0     0     1     1     0     0     1     1     0     0     1     1     0     0     1     1     0     0     1     1     0     0     1     1     0     0     0     1     1     0 <td>0</td>	0

### **ATTITUDE**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
4	1	4	2	3	5	2	1	3	5	30
4	4	3	5	3	3	2	5	5	4	38
4	5	1	2	3	5	5	3	1	4	33
5	5	4	5	5	3	4	3	5	5	44
5	5	5	5	5	5	5	5	5	5	50
5	5	4	5	5	4	4	3	5	5	45
5	5	4	5	5	4	5	5	5	5	48
1	1	1	1	1	1	1	1	1	1	10
5	5	4	5	5	3	3	3	5	5	43
5	4	4	4	3	4	5	5	4	5	43
4	5	5	5	4	3	4	3	5	5	43
4	4	4	5	2	3	5	4	3	4	38
1	5	2	4	1	5	2	4	1	5	30
5	4	2	1	4	3	4	5	3	4	35
5	4	3	4	3	4	4	2	4	1	34
3	4	2	4	3	3	4	3	4	3	33

5	4	3	4	2	3	4	3	4	3	35
2	3	4	4	4	2	5	4	2	5	35
5	4	5	4	3	4	2	4	3	4	38
5	4	3	3	3	3	5	4	3	3	36
5	4	5	4	4	5	4	4	4	4	43
5	3	5	3	4	2	4	5	3	4	38
3	5	4	5	3	4	4	3	5	3	39
5	4	3	5	4	3	5	4	3	5	41
4	5	3	4	5	3	4	5	3	4	40
5	4	4	5	5	3	5	3	5	3	42
5	4	4	5	4	1	5	4	1	4	37
4	1	4	4	3	3	5	1	3	5	33
3	3	4	5	3	5	4	5	3	3	38
5	4	3	1	5	3	4	5	4	3	37
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5	4	5	4	5	4	5	4	5	4	45
5	4	4	4	5	4	5	5	4	4	44
5	4	4	5	4	5	5	4	3	5	44
4	5	3	4	5	3	5	4	3	5	41
4	5	3	4	3	2	4	3	5	3	36
5	3	3	5	4	4	5	4	2	3	38
5	4	5	5	4	2	4	4	5	5	43
4	3	4	2	1	3	4	2	3	3	29
5	4	3	5	4	2	1	1	5	5	35
4	4	1	5	5	1	5	5	4	4	38
1	5	5	5	5	5	1	5	5	5	42
1	4	4	5	5	4	5	4	5	5	42
5	5	4	4	4	4	4	4	4	5	43
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5	4	5	4	5	5	5	4	4	3	44
5	4	5	4	5	4	4	4	3	3	41
5	4	5	4	4	4	3	3	5	4	41
5	4	5	4	5	4	5	4	5	4	45
5	4	5	4	5	4	5	3	5	4	44
5	4	4	4	4	3	4	4	4	5	41
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5	4	5	4	5	4	5	4	4	5	45
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5	3	4	4	5	5	5	3	1	1	36
5	4	3	5	5	4	4	3	5	4	42
5	4	5	4	5	4	5	4	5	1	42
4	5	3	4	4	4	5	4	1	4	38
5	4	5	4	5	4	5	5	5	4	46
1	1	5	4	4	1	4	1	2	1	24
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5	5	4	5	5	5	5	4	4	5	47
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5	4	4	5	5	4	5	5	4	5	46
5	5	5	4	4	4	5	5	5	4	46
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5	4	4	5	4	5	5	5	4	5	46
5	5	4	4	5	4	5	5	5	5	47
5	4	5	5	4	4	5	4	5	5	46
5	5	4	5	4	5	4	5	4	5	46
5	5	4	5	4	5	5	5	4	5	47
5	4	5	5	4	5	5	5	4	5	47
5	4	4	3	4	3	5	4	3	3	38
5	4	5	4	5	5	4	4	5	5	46
5	4	4	2	3	3	3	4	3	4	35
5	4	3	3	4	5	4	3	5	3	39
5	4	3	4	4	3	5	4	3	3	38
5	1	5	4	5	4	1	4	1	4	34
5	4	3	2	2	3	5	4	3	2	33
5	3	1	2	2	3	5	4	4	3	32
5	4	4	4	4	4	4	3	3	4	39
5	5	4	4	4	4	3	3	3	3	38
5	4	4	3	3	3	4	4	3	3	36
5	4	4	4	4	4	5	4	4	3	41
5	5	4	3	3	5	5	4	5	4	43
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4	3	5	5	3	4	4	3	4	5	40
3	3	3	4	3	4	3	4	3	4	34
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4	5	4	4	5	4	1	4	4	1	36
5	5	5	2	3	5	5	5	4	4	43
5	4	5	5	4	3	5	4	4	5	44
5	5	4	3	4	5	5	5	4	4	44
5	5	3	4	2	5	4	5	1	4	38
4	5	5	3	2	5	4	1	5	4	38
5	4	4	5	3	4	5	2	4	4	40

#### **ANNEXURE-XII**

#### PLAGARISM CERTIFICATE

A study to assess Knowledge and Attitude regarding e-health services among elderly at selected Urban community areas, Kolar to develop information Pamphlet

ORIGINA	ALITY REPORT								
1 g	% 0% ARITY INDEX INTERNET SOURCES	O% PUBLICATIONS	O% STUDENT PAPERS						
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3	Rodrigo Marino, Sergio Falk Schwendicke, Nicola Scheerman. "Terminolog Consensus Report of the Network Terminology Ta Square Platform LLC, 20 Publication	as Giraudeau, gy of e-Oral Ho e IADR's e-Ora ask Force", Res	Janneke ealth: I Health						
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