Dissertation

At

**GRG Health**

# "Knowledge, Attitude, and Practice of Digital health among Healthcare Professionals in India: **A Cross-Sectional study**"

By

Name : **ANTRA GOSWAMI**

Enroll No. : **PG/20/014**

Under the guidance of

**Dr. Punit Yadav**

**PGDM (Hospital and Healthcare Management)**

**2021-2023**


**International Institute of Health Management Research**

**New Delhi**

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# Completion of Dissertation

The certificate is awarded to

**ANTRA GOSWAMI**

In recognition of having successfully completed her dissertation in GRG Health

She has successfully completed her project on

"Knowledge, Attitude, and Practice of Digital health among Healthcare Professionals in India: **A Cross-Sectional study**"

Date of submission : 1 May 2023

**Organization: Growman Research Group (GRG Health), Gurugram**

**He comes across as a committed, sincere and diligent person who has a strong drive and zeal for learning.**

**We wish all the best for his future endeavour.**

**Assistant Manager**

**Growman Research Group**

**GRG Health**

## Certificate from Dissertation Advisory Committee

This is to certify that Ms. **Antra Goswami,** a graduate student of the **PGDM (Hospital & Health Management)** has worked under our guidance and supervision. He is submitting this dissertation titled "Knowledge, Attitude and Practice of Digital among Healthcare Professionals in India – A cross-sectional study" at "GRG Health" in partial fulfillment of the requirements for the award of the **PGDM (Hospital & Health Management).**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

DR PUMI YADAV
Institute Mentor Name,
Designation,
Organization IIHMR Delhi

Organization Mentor Name
Designation,
Organization GRG Health

## Certificate of Approval

The following dissertation titled **"Knowledge, Attitude and Practice of Digital Health among Healthcare Professionals in India: A cross-sectional Study"** at **"GRG Health"** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

| Name | Signature |
| --- | --- |
| Dr. Shiv | |
| Dr. Sumeet Saini | |
| Dr. Anandhi Ramachandran | |

# FEEDBACK FORM

**NAME OF THE STUDENT:** Antra Goswami

**NAME OF THE ORGANISATION IN WHICH DISSERTATION HAS BEEN COMPLETED**: GRG HEALTHCARE

**AREA OF DISSERTATION:** Primary Research

**ATTENDANCE:** 100% satisfactory

**OBJECTIVES ACHIEVED:** Yes – overall good performance

**DELIVERABLES/STRENGTH:** She possess a keen eye for observation, good learning abilities, hardworking, constantly driven to expand her knowledge and skills.

**SUGGESTIONS FOR IMPROVEMENT:** N A

**SUGGESTION FOR INSTITUTE (COURSECURRICULUM, INSUDTRY INTERACTION, PLACEMENT, ALUMNI):** Satisfactory

**Date: 01/05/2023**

**Place: Gurugram**

**Signature of Officer-in-charge**

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that Antra Goswami student of PGDM (Hospital & Health management) from International Institute of Health Management Research, New Delhi has undergone internship training at "GRG Health" from 1 Feb 2023 to 1 May 2023.

The candidate has successfully carried out the study designated to him during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish him all success in all his/her future endeavours.

DR PUMI YADAV

Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Mentor
IIHMR, New Delhi

## CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled Knowledge, Attitude, and Practice of Digital health among Healthcare Professionals in India: **A Cross-Sectional study** and submitted by Antra Goswami Enrollment No. – PG/21/014 under the supervision of Dr. Punit Yadav for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 2021 to 2023 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH (IIHMR)**
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# CERTIFICATE ON PLAGIARISM CHECK

| | | | |
|---|---|---|---|
| **Name of Student (in block letter)** | **Ms.:** ANTRA GOSWAMI | | |
| **Enrolment/Roll No.** | PG/21/014 | **Batch Year** | 2021-2023 |
| **Course Specialization (Choose one)** | Hospital Management | Health Management | Healthcare IT |
| **Name of Guide/Supervisor** | Dr/ Prof.: Punit Ydav | | |
| **Title of the Dissertation/Summer Assignment** | Knowledge, Attitude, and Practice of Digital health among Healthcare Professionals in India: **A Cross-Sectional study** | | |
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Name: Antra Goswami

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**Dean (Academics and Student Affairs)**

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# TABLE OF CONTENT

# 1. ORGANIZATION BACKGROUND

GRG Health is a global market research company that assists organisations all over the world in streamlining their research procedures. In the areas of healthcare, banking, IT and telecom, and energy, the organisation provides comprehensive market research solutions. The business offers our clients research solutions and has more than five years of experience. With its corporate headquarters in Gurugram, India, the business was founded in 2015. In Pune, Singapore, the USA, and other places, GRG Health has numerous offices. Additionally, CEO Magazine named GRG Health the most inventive market research firm for 2020.

GRG Health is an international market research company that aids businesses worldwide.A global market research company called GRG assists firms all around the world in streamlining their research procedures. In-depth market research solutions are provided by the business in the industries of healthcare, pharmaceuticals, food, finance, IT and telecom, and energy. The business offers our clients research solutions and has more than 28 years of experience. Over the course of all research projects, 10,000+ HCPs, KOLs, Payers, and Trade Professionals Surveys completed annually, GRG has covered more than 12+ international languages, more than 56+ countries, and more.

Research and intelligence services provided by GRG are motivated by the knowledge and fundamental industrial understanding of the group's members. Dedicated life sciences market researchers from the GRG foundation additionally promote innovation in significant research services and techniques. Our research services are personalised to meet the demands of each client. Our clients have been able to complete some difficult studies with the utmost ease because to GRG's skill in creating specialised research procedures.

One of our biggest competitive advantages is the depth of our knowledge of the life sciences and pharmaceutical industries in APAC and the EU. The study of the treatment flow, sales strategy,

market access stakeholders, and market research for our customers are some of our important services. 56 nations in Asia Pacific and Europe are eligible for our telephone-based market research surveys.

A global provider of market intelligence, Growman Research Group (GRG) focuses on the healthcare, pharmaceutical, medical device, and life sciences industries. A dedicated group of market researchers for the life sciences makes up GRG. According to the requirements of our clients, we offer specialised services. We've successfully completed various difficult studies thanks to our experience creating unique research approaches.

We have years of experience and knowledge of the pharma and life sciences markets in APAC and the EU. KOL analysis, treatment flow analysis, sales strategy, market research, and market access stakeholders are some of our major services. Additionally, we carry out telephone-based market research polls in 56 nations around Asia, the Pacific, and Europe.

**Services Offered:**

We make sure that ongoing efforts are made to improve the quality of the data, including recording live call monitoring, having the Survey Quality team verify the data, having regular training sessions for researchers, exchanging best practises among teams, etc. The following services are provided to make the project execution even simpler:

- Questionnaire Proofing
- Survey Localization and Translation
- Sample Planning and Development
- Multilingual support
- Data Entry
- Analysis and Reporting

GRG has a committed group of skilled scripters that assist us in creating and integrating challenging quizzes and putting them online. All of our clients' needs are met with the assistance of our project management experts and our knowledgeable survey programming staff. Professionals who programme surveys have in-depth knowledge of their fields and are sensitive to the needs of our clients. Our programmers are highly skilled in the use of Java script, ASP, and flash. The multilingual survey programming team has experience in creating complicated logic-checked questionnaires. GRG distinguishes itself from the competition through its willingness to comprehend the needs of its clients and commitment to timely, high-quality delivery.

**COMPETITION INTELLIGENCE**

Keep an eye on your rivals. assemble professional analysis and first-hand information about the competition.

The unpredictable nature of local/ground level competitive actions is an exciting challenge for pharma and medical device businesses on a daily basis. At GRG, we define competitive intelligence as a superset of global level and regional level insights.

GRG's "CI circle of researchers" have a solid track record of collecting competition information on both levels (global and regional) thoroughly when it comes to the always changing environment of growing markets in Asia-Pacific, LATAM, the middle east, and developed markets in the EU. To acquire verified data on competitiveness, we combine expert interviews with secondary research.

Our CI information is populated across the following models within Pharma and medical technology verticals.

**MARKET ACCESS INSIGHT**

Create, programme, and host online polls with simple real-time reporting.Due to the increasing number of high-tech, expensive pharmaceuticals that are entering the market and the intense demand on governments and/or healthcare systems to reduce the costs of their prescription bills, market access has grown in importance over the last five to ten years. PH Health Economics and

Outcomes Research (HEOR), Pricing and Reimbursement' (P&R), and Cost-Effectiveness Research (Payer (or Payor) Research) are just a few of the therapy areas that Payer Research Experts are involved in.

**KOL MARKET INSIGHTS**

Determine and profile opinion leaders according to specific needs. Map showing the regional and national influence of kols.

The requirement for an efficient KOL management strategy from a worldwide perspective is being investigated by healthcare companies all over the world as one of the key strategic areas for their annual growth goals. Due to its expertise in KOL discovery and management, GRG's KOL circle of experts offers fresh perspectives on the development of thought leaders.

**HOW GRG BENEFIT CLIENT**

Our customers gain significant value from our customised approach to KOL identification by better understanding the landscape of opinion leaders in the drug development process.

Important marketing data Product introduction Brand establishment

**Market Research:**

The process of accumulating, analysing, and interpreting data about a market, a product or service to be sold in that market, and past, present, and potential customers for the product or service; research into the features, spending patterns, locations, and needs of your business's target market, the industry as a whole, and the specific competitors you face.

**Market research involves two types of data:**

- **Primary information-** The purpose of this original study was to gather information specifically for the current goal. A survey, an interview, a focus group, behaviour observation, or an experiment can all be used in this study.

- **Secondary information-** These studies have already been collated and organised for you. Reports and studies from governmental organisations, professional associations, or other companies operating in your industry are examples of secondary information. Your research will probably consist primarily of secondary sources.

## QUALITATIVE AND QUANTITATIVE RESEARCH

GRG has two distinct internal research teams, each with a focus on both quantitative and qualitative research. We offer our clients quality work while assisting them in choosing the best data collection method. We examine the information gathered during the fieldwork and then provide practical insights. 1.3 million highly engaged participants who were selected from different industries to guarantee diversity make up our study panel. We have kept a database of healthcare respondents that is well profiled, includes information on patient conditions, and includes doctors and other healthcare specialists. We offer a healthcare respondent database with speciality fields in 59 different nations.

## HEALTHCARE AUDIENCE REACH

The healthcare respondent database includes information on consumer illnesses, doctors, and other healthcare professionals. It is highly profiled. A decent representation of all specialties is available

in the 59-country healthcare respondent database that GRG has. They make sure that the healthcare respondent database is engaged, and as a result, their CATI and online respondents are quite responsive. We have unparalleled access to KOLs, market access stakeholders, trade professionals, distributors, health economists, lab professionals, lab owners, etc., which is one of our database's highlights and points of differentiation.

**PHONE BASED DATA COLLECTION (CATI) CAPABILITIES**

The GRG CATI data gathering team offers cross-functional domain experience as well as multilingualism, which aids in serving the needs of multi-geography research projects. Research projects that ensure excellent quality are carried out thanks to the global reach, seamless technology, and our multi-national interviewing crew. the ongoing efforts to improve the quality of data obtained, including call monitoring, data checks by the Survey Quality team, monthly training sessions for researchers, sharing of best practises between teams, etc. The offered services further streamline the project's execution:

- Survey localization and translation; - Questionnaire proofreading; - Sample development

supports multiple languages;-Analysis and Reporting - Data Entry

**WEB BASED DATA COLLECTION (CAWI) CAPABILITIES**

GRG and their partners assembled a global panel of decision-makers and influencers from various business functions and industries in response to the shift in demand for online research over CATI. GRG can target CEOs from a variety of industries because to the thorough profile of their partner panellists, which also helps to lessen respondent fatigue. They provide clients with global sample services so they can complete research tasks quickly and affordably. The following services are also offered as a bundle in Online Research:

– Questionnaire Proofing

– Survey Localization and Translation

– Survey Designing and Hosting

**EXPERTISE INCLUDES:**

– CATI Programming

– Web Based Survey Programming

– Online Reporting

– Quality Assurance

– Visual QA

– Audio/Videos Rating Tools

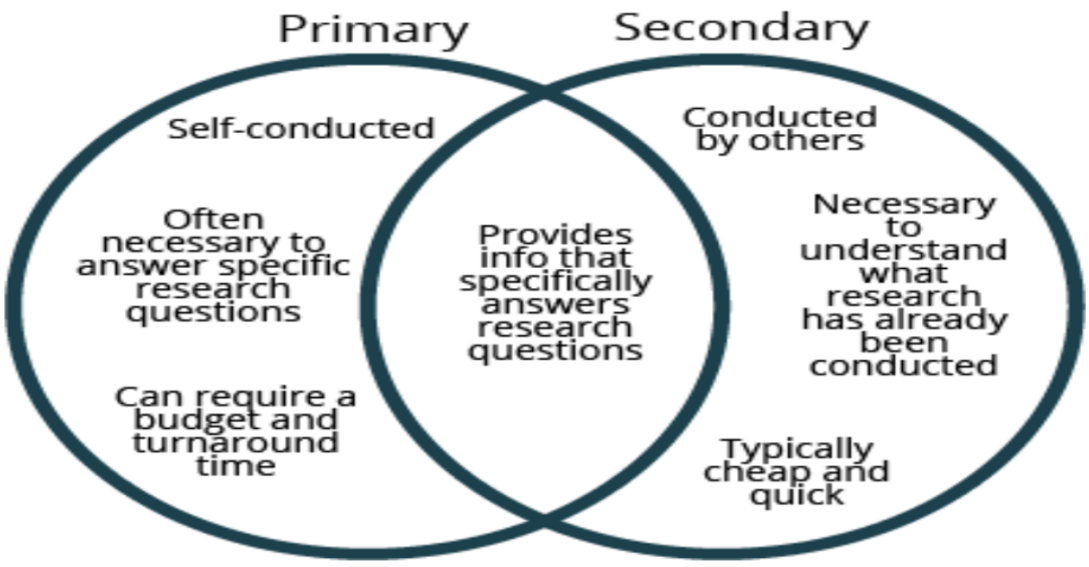
– Flash implementations

**TECHNOLOGIES USED:**

– Confirmit

– SPSS-Dimensions

– Kinesis



Knowledge, Attitude, and Practice of Digital health among Healthcare Professionals in India:

**A Cross-Sectional study**

# 2. INTRODUCTION

In medicine, the term "digital health" refers to the use of information and communication technologies (ICT) to manage diseases, reduce health risks, and promote wellness. It includes the use of wearable devices, mobile health, tele-health, health information technology, and telemedicine. The goals of digital health products and services are to improve the quality, access, & availability of healthcare, and provide personalized healthcare to all. The use of digital health technology has a broad scope in reducing inefficiencies and overall costs to healthcare delivery. [(1)] According to WHO recommendations, the use of digital health for healthcare professional education, training, and delivery can supplement the traditional methods rather than replace them and this additional method of delivery can increase the availability, accessibility, and acceptability of healthcare education and services while being more reasonably priced, which will enable exchange, communication and extend the scope of healthcare delivery. [(2)] In a larger sense, the phrase describes not only a technological advancement but also a mindset, a style of thinking, an attitude, and a dedication to networked, global thinking in order to use information and communication technology to improve the healthcare locally, regionally, and globally. [(1)]

A study done by Research gate to know the knowledge, attitude, and practice towards digital health technology in Kuwait shows that about 58.8% of participants had knowledge, 66.3% of participants had a favourable attitude towards digital health while only 50.4% practiced Health Information Technology. [(3)] The use of technology in the vertical of medicine is transforming the conventional methods of patient care by making appropriate and adequate use of services and making them available, accessible, and affordable for all. Although the adoption of technologies in underdeveloped nations has proven to be challenging, a strong emphasis and initiatives for formulating digital health policies by policymakers have been placed in developing countries to improve the overall quality of care. [(4)] To improve the acceptance of digitalization in the health field it is important to assess the

knowledge, attitude, and practice of digital health among health professionals, and to analyse various associated factors associated with their present KAP.

# 3. OBJECTIVES

1. To assess the knowledge, attitude, and practice (KAP) of digital health in healthcare professionals
2. To identify various factors associated with particular KAP (Knowledge, Attitude, and Practice).

# 4. METHODOLOGY

- Study Design:

  The study design used is Cross-sectional study design.

- Data Collection tool:

  Data collection was done using a Google form that consisted of a pre-defined questionnaire.

- Sampling method:

  The sampling method used is snowball sampling.

- Sample Size: 100
- Data cleaning: Microsoft Excel was used for cleaning the data.
- Data analysis: IBM SPSS software was used for analysing the data.
- Inclusion criteria:

  Health care professionals between the age group of 23 to 60 years were included in study.

- Exclusion criteria:

  Administrative staff, office managers & participants who did not consent were excluded from the study.

- Ethical consideration:

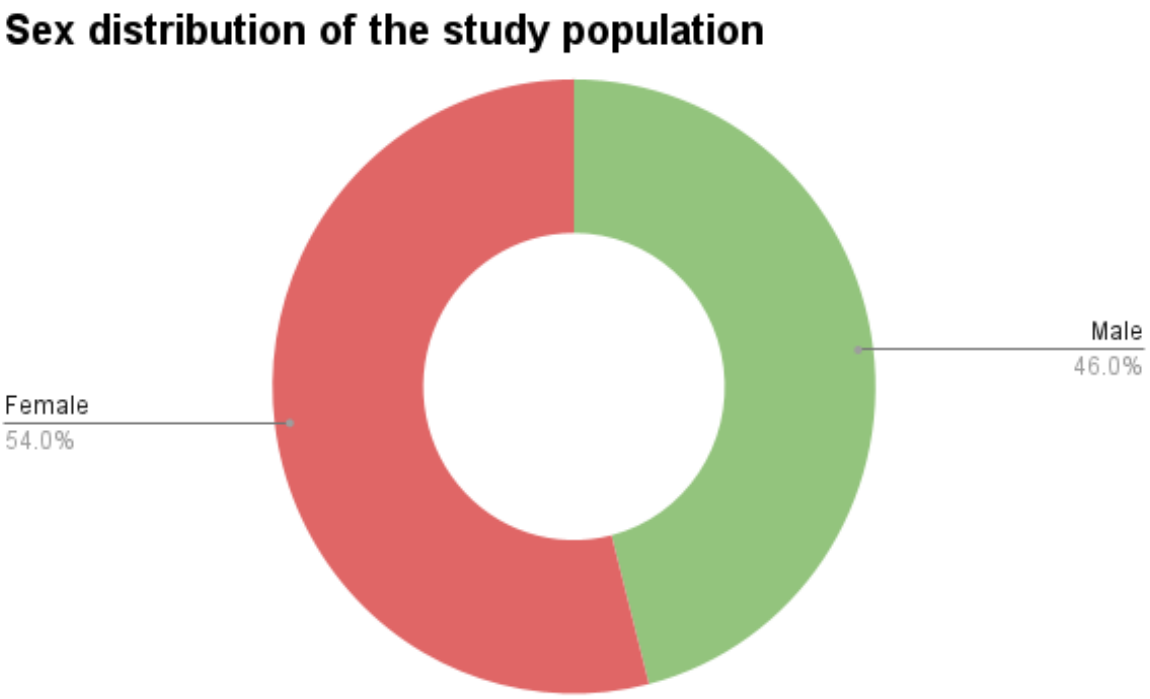
Informed consent was obtained by all the participants and ethical clearance was taken from SRB committee form IIHMR, Delhi.

# 5. RESULTS

## **5.1** RESULT 1

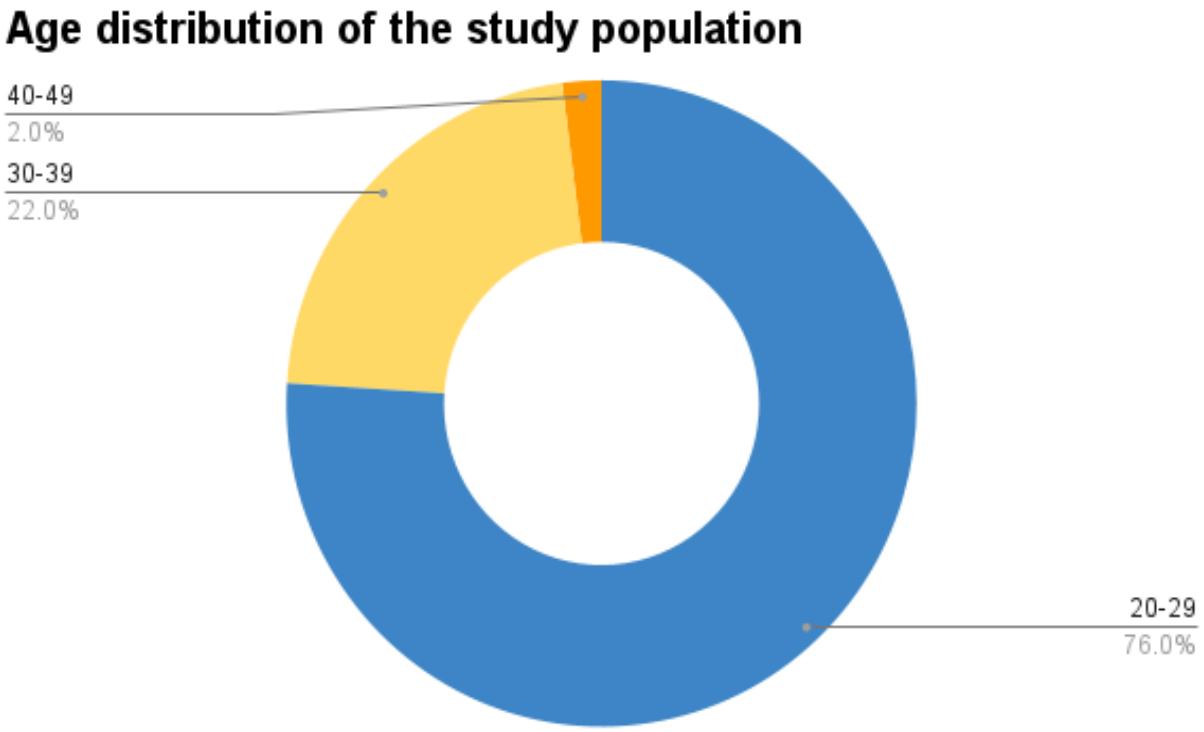
**General characteristics of the study population**

This study reports the demographic information of a study sample consisting of 100 participants. The sample is divided into male and female participants, with 46% being male and 54% being female.

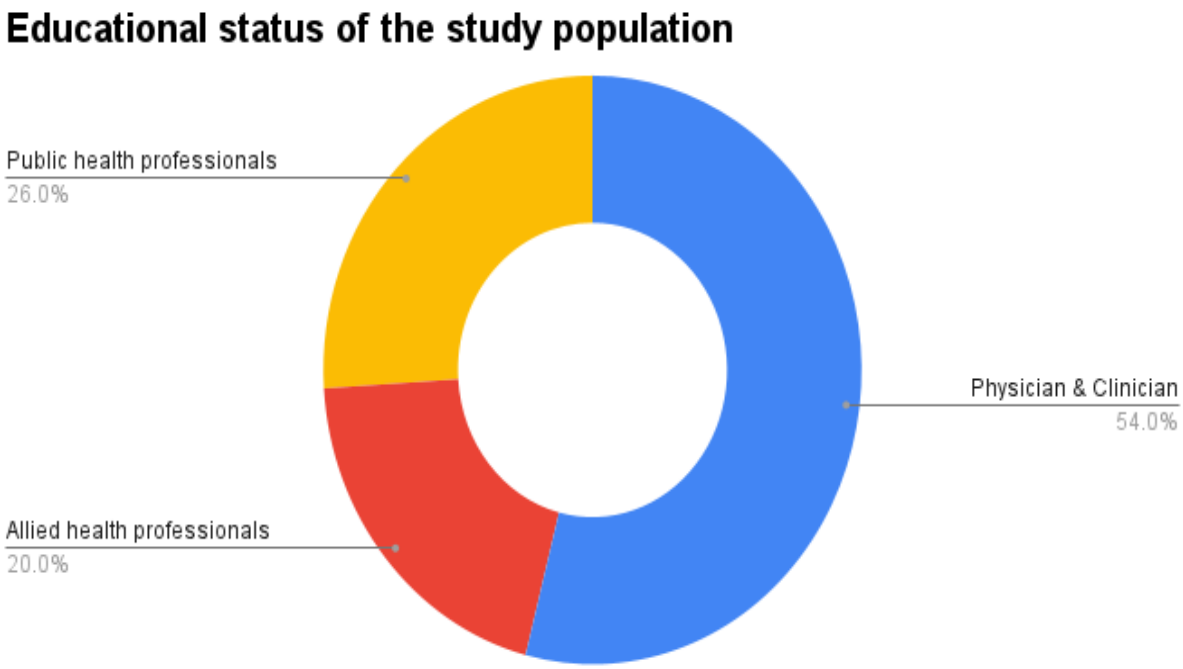



Regarding the age distribution, the majority of the participants (76%) belong to the age group of 20-29 years, followed by 22% of participants belonging to the age group of 30-39 years, and 2%

belonging to the age group of 40-49 years. None of the participants belong to the age group of 50 years or above. The mean age of the participants is 32 ± 5 years. This indicates that the average age of the participants falls between 27 years and 37 years. The standard deviation of 5 years indicates that the age of the participants is spread around the mean age, with some participants being younger or older than the mean age.

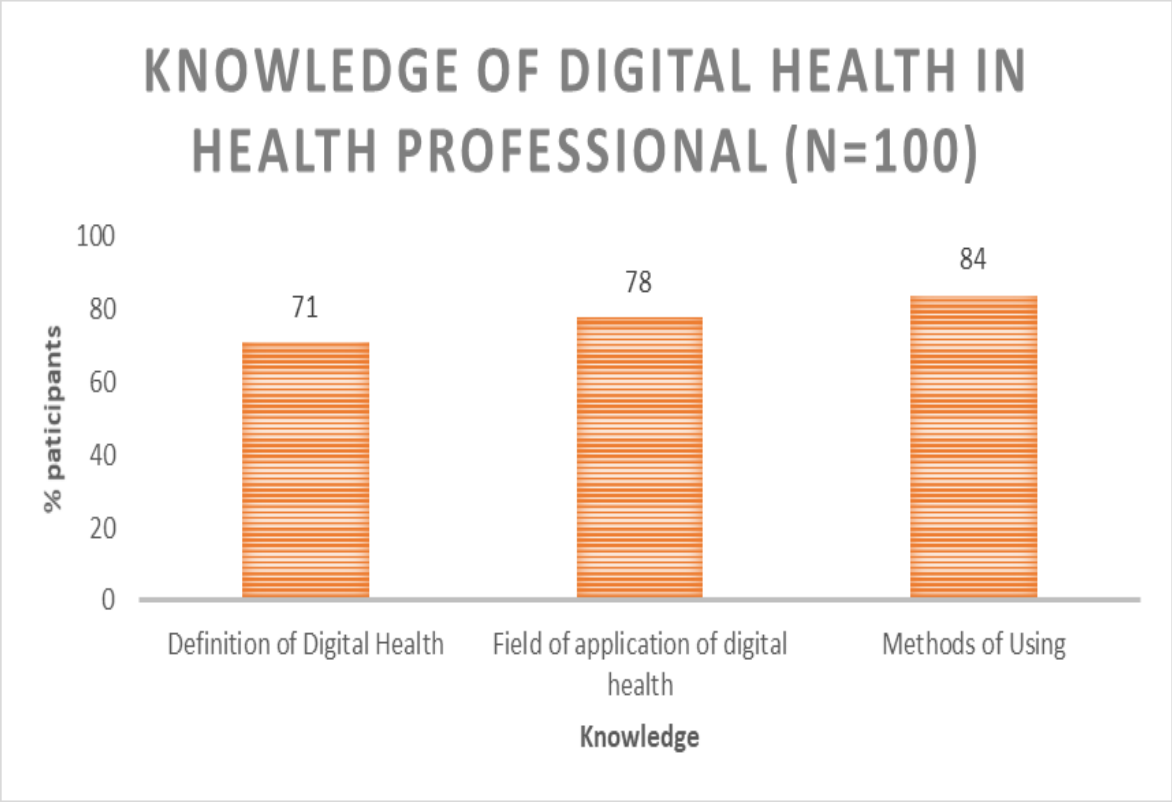



In this study, the participants have been categorized into three groups based on their education background. The majority of the participants, which accounts for 54%, are Physicians & Clinicians. 20% of the participants are Allied Health Professionals, and the remaining 26% are Public Health Professionals. This categorization has been done to understand the impact of education on the study's outcome.




## **5.2** RESULT – 2

**Knowledge Towards Digital Health**



Knowledge regarding digital health has been categorized into three main areas including the definition of digital health, the field of application of digital health, and the methods of using/application. Digital health refers to the use of technology and digital tools to improve health and healthcare delivery. It includes various technologies such as mobile health, telemedicine, health information technology, wearable devices, and personalized medicine. The field of application of digital health is vast and includes areas such as disease prevention, health promotion, diagnosis, treatment, and rehabilitation.

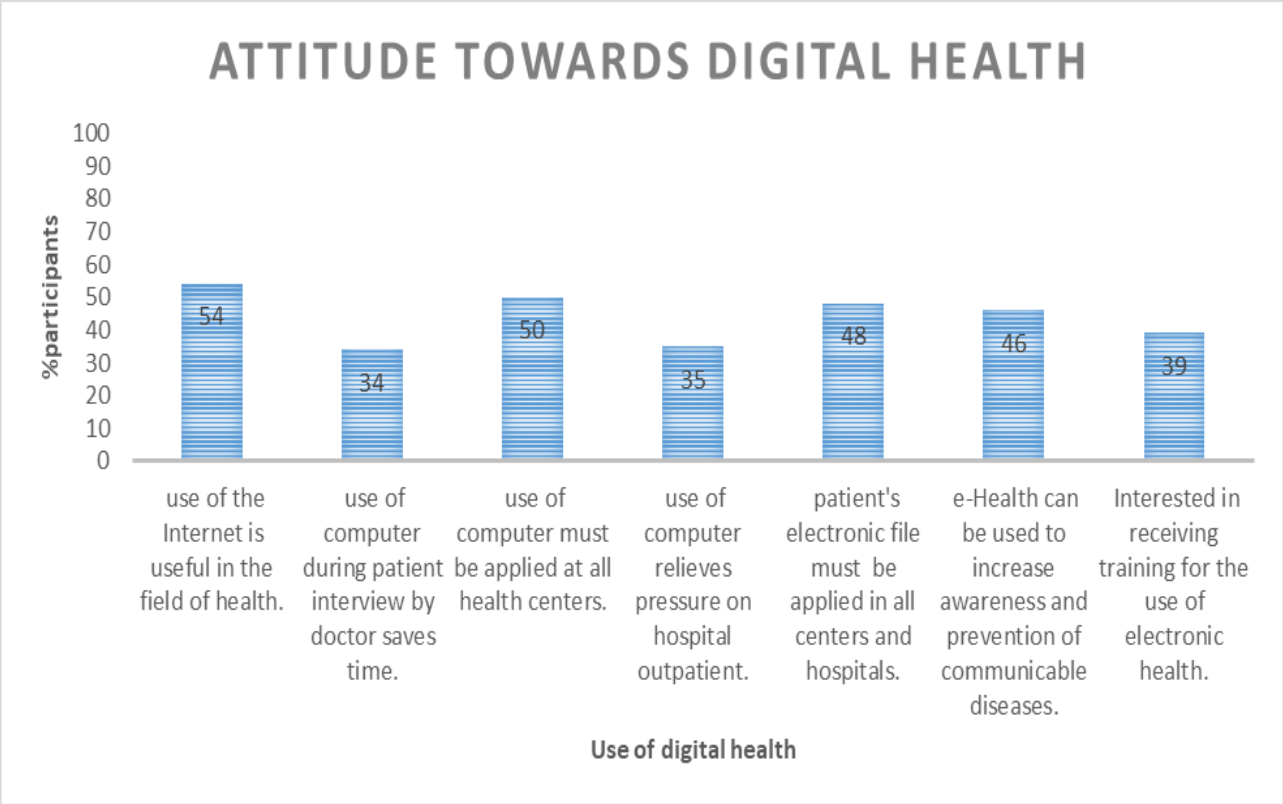
Digital health tools and technologies can be used in a variety of settings, ranging from hospitals and clinics to community health centres and home care settings. In terms of the methods of using/application, there are various ways in which digital health tools can be utilized. These include remote monitoring, data analysis, decision support systems, and patient engagement platforms. The use of digital health tools can help to improve patient outcomes, reduce healthcare costs, and increase access to care. According to my study, a significant percentage of participants have some level of knowledge about digital health.

Specifically, **71% of participants knew the definition of digital health, 78% knew about the field of application of digital health, and 84% knew regarding the methods of using digital health tools.**

In conclusion, digital health is a rapidly growing field that has the potential to transform healthcare delivery and outcomes. Understanding the various aspects of digital health is essential to harness its benefits and improve healthcare for all.

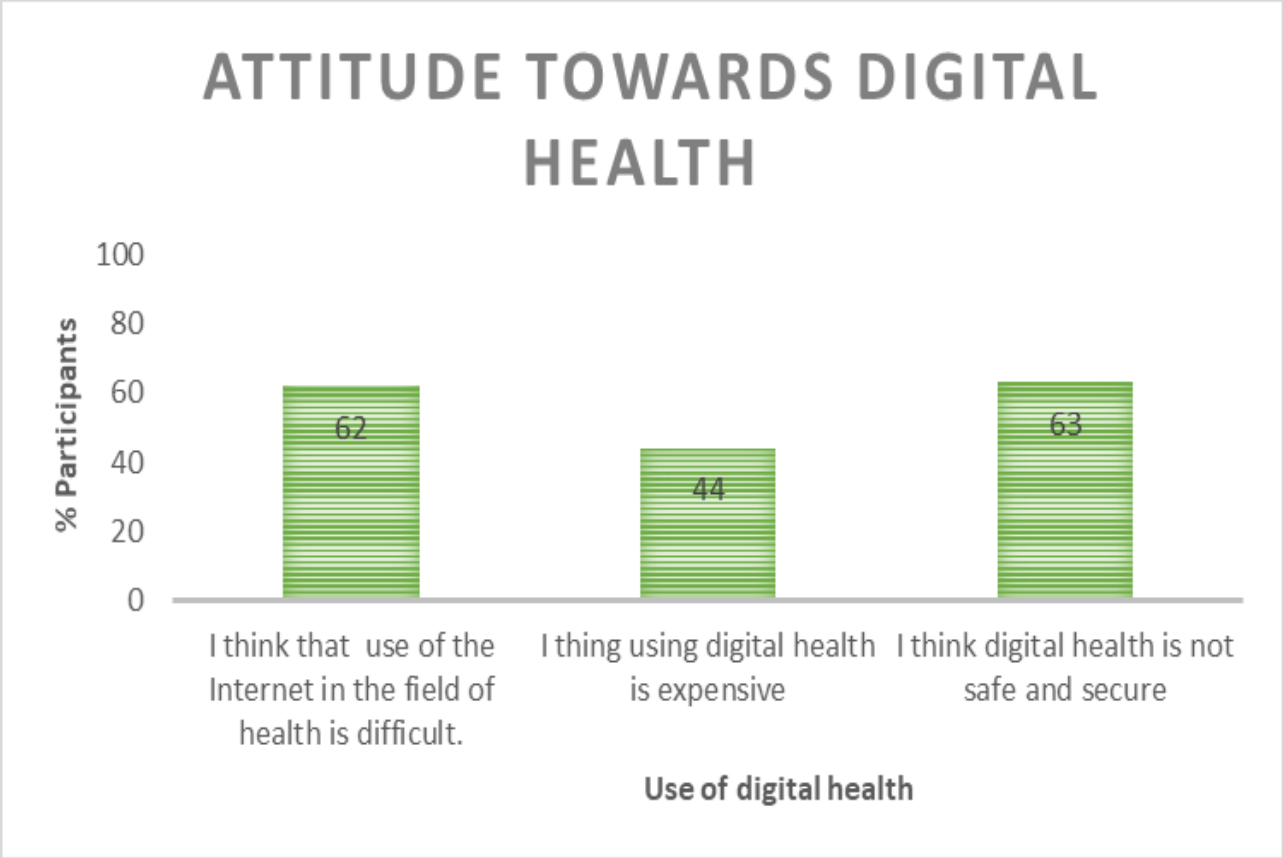
## 5.3 RESULT 3

**Attitude towards Digital Health**




The attitude towards digital health among participants was found to be generally positive. According to the study, **54% of participants believe that the use of the internet is useful in healthcare**. This suggests that digital health can provide patients with a wealth of information and resources that can be used to improve their health. In addition, **34% of participants stated that the use of a computer during patient interviews is useful.** This can help healthcare providers to streamline their patient interactions and improve the accuracy of their diagnoses. A significant portion of the participants, **50%, believe that the use of computers must be applied in all health centres.** This indicates that there is a growing demand for digital health technologies in the healthcare industry. Furthermore, **35% of participants believe that the use of computers can relieve pressure on hospital outpatient services.** This suggests that digital health technologies can improve the efficiency of healthcare services and help to reduce the burden on healthcare providers.

The survey also found that **48% of participants believe that patient e-records must be applied in all health centres**. This highlights the potential benefits of digital health in terms of improving patient outcomes and facilitating better communication between healthcare providers.

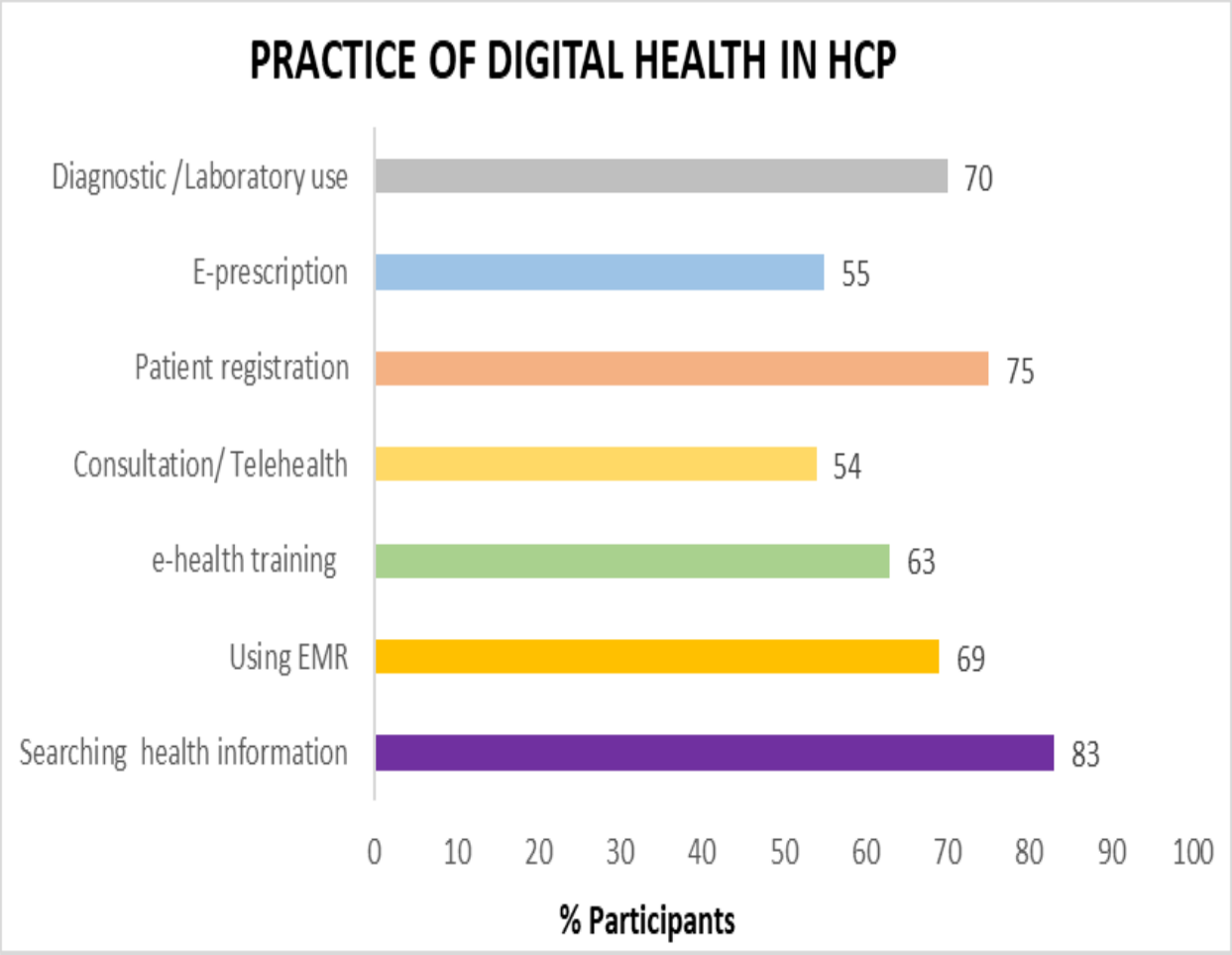



The world is rapidly transitioning towards digital healthcare, and it appears that people are embracing this change with a positive attitude. According to a recent survey, **62% of participants stated that they did not find digital health difficult to use**. This shows that people are becoming increasingly comfortable with technology and the role it plays in healthcare. Furthermore, **44% of participants did not view digital health as an expensive option.** This is a significant finding as cost has been a major concern for many people who are interested in adopting digital health solutions. With this perception of affordability, more people may be inclined to use digital health tools for their healthcare needs. Another important aspect of digital health is security, and it seems that people have confidence in this area as well. The study found that **63% of participants believed that digital health is safe and secure**. This is a crucial finding as security concerns have

been a major barrier to the adoption of digital health solutions. Overall, the results of this survey indicate that people are increasingly positive towards digital health. As more and more healthcare solutions become digitized, it is important for healthcare professionals to continue to emphasize the benefits of technology and to address any concerns that people may have. With a positive attitude towards digital health, more people may be inclined to adopt these solutions and improve their overall health outcomes.

## **5.4** RESULT 4

**Participants Practice of Digital Health:**




Digital health has become an integral part of the healthcare industry, and it has revolutionized the way healthcare services are delivered to patients. In this document, we will discuss the participants'

practice of digital health based on various purposes. According to recent research, **70% of participants use digital health for diagnostic and laboratory purposes.** Digital health has made it easier for healthcare providers to diagnose and monitor various health conditions by providing accurate and timely results. Patients can now receive their test results online, which saves them time and reduces the need for physical visits to healthcare facilities. Another significant aspect of digital health is e-prescription, and **55% of participants use it for this purpose**. E-prescription has provided a more efficient and secure way of prescribing medication to patients. Healthcare providers can now send prescriptions to pharmacies electronically, which eliminates the need for paper prescriptions and reduces the chances of errors. Patient registration is another area where digital health has made significant progress, and **75% of participants use it for this purpose**. Digital health has made it easier for patients to register and access healthcare services online. Patients can now fill out forms, schedule appointments, and access their medical records online, which saves them time and reduces the workload of healthcare providers. Finally, **54% of participants use digital health for consultation and telehealth services.** Digital health has made it possible for patients to access healthcare services remotely, which has become increasingly important during the COVID-19 pandemic. Patients can now consult with healthcare providers via video calls or chat, which reduces the need for physical visits and saves time. After that, **63% of participants use digital health for e-health training.** This suggests that digital health has become an integral part of training for healthcare professionals. With the help of digital health, participants can access training modules, attend webinars, and engage in other forms of e-learning to improve their skills and knowledge. Secondly, **69% of participants use digital health for accessing patient records**. Digital health has made it easier for healthcare professionals to access patient records and medical histories. This has improved the quality of care that patients receive as healthcare professionals can make more informed decisions based on the patients' medical history. Lastly, **83% of participants use digital health for searching health information**. With the help of digital health, participants can access a wealth of health information, including medical journals,

research studies, and other relevant resources. This has helped participants stay up-to-date with the latest developments in healthcare and provide better care to their patients. In conclusion, the widespread use of digital health among participants in various healthcare settings is a testament to its effectiveness in improving patient care and healthcare outcomes. As digital health continues to evolve, we can expect to see even more innovative solutions that will transform the healthcare industry.

# DISCUSSION

The study attempts to obtain a broad picture of the current levels of Knowledge, Attitude and Practice of Digital Health among HCP.

According to our study, the healthcare professionals (HCP) in India have an overall knowledge percentage of 76%. This indicates that the HCPs in India have a higher level of knowledge when compared to the study conducted on HCPs in Kuwait, where the knowledge percentage was found to be 58.9 ± 24.2. A study conducted by Research Gate to assess the knowledge, attitude, and practice of participants towards digital health technology in Kuwait revealed that approximately 58.8% of participants had knowledge regarding digital health technology.

Additionally, about 66.3% of participants had a favourable attitude towards digital health technology. However, only 50.4% of participants were found to be practicing digital health technology. These findings suggest that there is a need to focus on educating and encouraging HCPs in Kuwait to adopt and implement digital health technology in their practice. It is important to promote awareness and training programs to enhance the knowledge and practice of digital health technology among HCPs in Kuwait.

A significant proportion of participants (84%) agreed that the internet, email, and visual communication are the appropriate methods of using digital health. This finding highlights the

importance of technology in the healthcare industry, and the need for healthcare providers to adapt to new methods of communication. In addition, our study also found that 39% of people had a positive attitude towards receiving training for using digital health. This suggests that there is a growing interest among individuals to learn about the latest technological advancements in the healthcare industry.

However, the attitudes of healthcare professionals (HCP) towards using computers or patient interviews (34%) and OPD (35%) were found to be very low in our study. This finding suggests the need for further training and education for HCPs to increase their comfort level with technology and encourage them to adopt digital health practices. According to our observations, the majority of participants (83%) tend to use digital health tools solely for the purpose of searching health information. However, they do not utilize these tools for other reasons.

Upon further investigation, we discovered that there were some misconceptions regarding the difficulty of use (38%) and security concerns (37%) among healthcare professionals (HCP) that prevented participants from using digital health tools for other purposes. It is important to note that these misconceptions can be addressed through proper education and awareness programs. By providing sufficient training on the use of digital health tools, we can eliminate any perceived difficulty of use. Similarly, we can address security concerns through the implementation of robust security measures.

Overall, it is clear that there is a need for greater education and awareness surrounding the use of digital health tools. By doing so, we can increase the utilization of these tools for a wider range of purposes, ultimately leading to better healthcare outcomes for all. However, the results of the study showed that there was no significant difference in the knowledge, attitude, and practice of individuals based on their gender or educational status. This finding is important because it suggests that knowledge, attitude, and practice are not influenced by gender or educational status..

# CONCLUSION

The present study has found that healthcare professionals have good knowledge but not a positive attitude toward digital health. This indicates a gap between the participants' knowledge and attitude, which needs to be identified and bridged. It is imperative to address these gaps through capacity building, training, improving awareness, and addressing resistance.

Digital health technologies are becoming increasingly popular in healthcare settings. These technologies can help to improve patient safety, reduce medical errors, and increase access to care. However, as the study indicates, there is a gap between the knowledge and attitude of healthcare professionals. This gap needs to be addressed to ensure that digital health technhealthcare professionals. This gap needs to be addressed to ensure that digital health technologies can be effectively implemented in healthcare settings.

Capacity building is an essential step in addressing the gap between knowledge and attitude. Healthcare professionals need to be equipped with the necessary skills and knowledge to use digital health technologies effectively. This can be achieved through training programs that provide hands-on experience with these technologies.

Improving awareness is also crucial in bridging the gap between knowledge and attitude. Healthcare professionals need to be informed about the benefits of digital health technologies and how they can be used to improve patient outcomes. This can be achieved through information campaigns, workshops, and conferences.

Resistance to change is another factor that needs to be addressed. Healthcare professionals may be resistant to using digital health technologies due to various factors such as lack of trust, fear of job loss, and concerns about patient privacy. Addressing these concerns through open communication

and transparency can help to alleviate resistance and improve acceptance of digital health technologies.

In conclusion, the study's findings highlight the need to bridge the gap between knowledge and attitude towards digital health technologies. Capacity building, training, improving awareness, and addressing resistance are all crucial steps in achieving this goal. By addressing these gaps, healthcare professionals can effectively implement digital health technologies to improve patient outcomes and technologies can be effectively implemented in healthcare settings.

# LIMITATIONS

Limitations of the study must be considered in the interpretation of the results. One important limitation is that the study sample belonged to the age group of 27 to 37 years, which means that the effect of age on KAP was not possible to assess. This is because the sample is not representative of the entire population, and the findings may not be applicable to individuals outside of this age group. Another limitation of the study is the use of a non-probability method of sampling. This could have led to bias in the selection of participants, as individuals who were more willing to participate or who had certain characteristics may have been overrepresented in the sample. This means that the findings may not be generalizable to the larger population, and caution should be taken when interpreting the results.

Overall, while this study provides valuable insights into KAP, it is important to consider these limitations when interpreting the findings and applying them to other populations. Future studies could address these limitations by using a more representative sample and a probability sampling method.

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