

KNOWLEDGE AND ATTITUDE REGARDING THE USE OF ARTIFICIAL INTELLIGENCE FOR HEALTH INFORMATION AND HEALTHCARE DECISION MAKING AMONG THE GENERAL POPULATION

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ABSTRACT

Introduction: Artificial Intelligence (AI) has emerged as a transformative technology in healthcare, enhancing access to health information and supporting clinical decision-making. AI-powered tools such as chatbots, virtual assistants, and symptom checkers are increasingly used for healthcare guidance. Despite their growing adoption, concerns regarding the accuracy, privacy, and reliability of AI-generated information remain significant. Assessing public knowledge and attitudes is essential for promoting the safe, ethical, and responsible use of AI in healthcare. This study aims to evaluate the knowledge and attitudes regarding the use of AI for health information and healthcare decision-making among the general population. **Objectives:** This study aims to assess the knowledge and attitudes of the general population regarding the use of Artificial Intelligence (AI) for health information and healthcare decision-making. It also evaluates trust in AI-generated health information, willingness to use AI for future healthcare needs, and the association between selected socio-demographic variables and participants' knowledge and attitudes toward AI. **Methods:** A quantitative descriptive cross-sectional study was conducted among 223 adults aged 18 years and above using a non-probability convenience sampling technique. Data were collected through a structured self-administered questionnaire distributed online using Google Forms. The questionnaire included socio-demographic characteristics, knowledge-related questions, and attitude statements regarding AI in healthcare. Data were analyzed using descriptive statistics and Chi-square tests, with a significance level of $p < 0.05$. **Results:** Among the 223 participants, 96.0% were aware of AI technologies, while 76.7% had previously used AI tools for obtaining health-related information. Most participants believed AI could explain diseases and symptoms (69.1%) and recognized that AI-generated health information should be verified using reliable medical sources (71.3%). More than half (56.1%) agreed that AI should assist healthcare professionals rather than replace them, and 47.1% expressed willingness to use AI for future health information. Significant associations were observed between age and AI awareness/use, gender and selected knowledge variables, and education and verification of AI-generated health information ($p < 0.05$). **Conclusion:** The findings indicate that the general population possesses satisfactory knowledge and generally positive attitudes toward AI in healthcare. Respondents appreciated the convenience and usefulness of AI but emphasized verifying AI-generated information and consulting healthcare professionals before making medical decisions. Strengthening digital health literacy and ensuring ethical implementation of AI are essential to maximize its benefits while minimizing potential risks.

KEYWORDS: Artificial Intelligence, Healthcare, Health Information, Knowledge, Attitude, Trust, Healthcare Decision-Making, General Population.

1. INTRODUCTION

Artificial Intelligence (AI) has emerged as one of the most significant technological innovations in modern healthcare, transforming the way health information is accessed, interpreted, and utilized. AI refers to computer systems capable of performing tasks that typically require human intelligence, including learning, reasoning, problem-solving, and decision-making. Recent advances in machine learning, natural language processing, and large language models have enabled AI-powered applications to provide instant responses to health-related queries, assist in symptom assessment, support clinical decision-making, and facilitate patient education.^[1,4] These technologies have become increasingly accessible through digital platforms, making them valuable tools for both healthcare professionals and the general public.^[1]

The growing availability of AI-based healthcare tools such as ChatGPT, Gemini, Siri, Copilot, and other virtual assistants has significantly changed how individuals seek health information. These systems offer convenient, rapid, and cost-effective access to medical knowledge and have the potential to improve health literacy, encourage early health-seeking behavior, and enhance communication between patients and healthcare providers. AI has also demonstrated promising applications in disease prediction, medical imaging, clinical documentation, personalized medicine, and remote patient monitoring. Consequently, AI is increasingly recognized as an important component of digital health and modern healthcare delivery.^[1]

Despite these advantages, widespread adoption of AI in healthcare remains associated with several challenges. The accuracy and reliability of AI-generated information may vary depending on the quality of available data and the algorithms used.^[4] Concerns regarding misinformation, privacy, confidentiality, ethical issues, algorithmic bias, and accountability continue to influence public confidence in AI-assisted healthcare.^[2,5] Furthermore, AI-generated recommendations should not replace professional clinical judgment, particularly in situations requiring comprehensive medical assessment and individualized treatment.^[4,5] Therefore, understanding public perceptions regarding AI is essential for ensuring its responsible and effective integration into healthcare systems.^[2,5]

Several recent studies have investigated public attitudes toward AI in healthcare. Previous research has reported that individuals generally appreciate the convenience, accessibility, and efficiency of AI technologies while simultaneously expressing concerns regarding data privacy, transparency, reliability, and the possibility of incorrect medical advice. Studies have also emphasized that trust, digital literacy, and awareness significantly influence the acceptance and adoption of AI-assisted healthcare services.^[2,5] Most users perceive AI as a supportive technology that should complement healthcare professionals rather than replace them.^[5]

Although research on AI in healthcare has expanded globally, evidence regarding public knowledge, trust, and attitudes remains limited in many populations. Differences in age, education, occupation, digital literacy, and previous exposure to AI may influence individuals' perceptions and acceptance of these technologies. Assessing these factors is important for identifying gaps in awareness and developing educational interventions that promote the safe, ethical, and responsible use of AI in healthcare.^[2,5]

Therefore, the present study was undertaken to assess the knowledge, attitudes, trust, and willingness regarding the use of Artificial Intelligence for health information and healthcare decision-making among the general population. The study also examined the association between selected socio-demographic variables and participants' knowledge and

attitudes toward AI, thereby providing evidence to support future policies, educational programs, and responsible implementation of AI in healthcare.

Table 1: Major Applications of Artificial Intelligence in Healthcare.

Healthcare Area	Application of Artificial Intelligence
Health Education	Provides general information about diseases, symptoms, prevention, and healthy lifestyle practices.
Understanding Medical Reports	Explains laboratory reports and medical terms in simple language to improve patient understanding.
Medication Information	Provides general information about medicines, their uses, common side effects, and precautions.
Lifestyle Guidance	Offers recommendations on diet, nutrition, exercise, sleep, and healthy habits based on general health guidelines.
Mental Health Support	Provides basic mental health information, stress management tips, and emotional support, while encouraging professional help when needed.

2. METHOD

2.1 Study Design

A quantitative descriptive cross-sectional study was conducted to assess the knowledge and attitudes regarding the use of Artificial Intelligence (AI) for healthcare information and healthcare decision-making among the general population. The cross-sectional design enabled the collection of data from participants at a single point in time to evaluate their knowledge, attitudes, trust, and willingness to use AI in healthcare.

2.2 Study Setting

The study was conducted using an online survey platform. Data were collected through a structured self-administered questionnaire developed using Google Forms and distributed through various digital platforms and social media networks. The online mode of data collection facilitated wider participation, convenience, and efficient collection of responses from adults across the general population. The questionnaire consisted of socio-demographic information, knowledge-related questions, attitude statements, trust-related items, and willingness to use AI for healthcare information and healthcare decision-making.

2.3 Participants

The study included adults aged 18 years and above from the general population who voluntarily agreed to participate and provided informed consent before completing the questionnaire. Individuals below 18 years of age, those who declined consent, and incomplete questionnaire responses were excluded from the study. A total of 223 completed responses were included in the final analysis. Participants were recruited using a non-probability convenience sampling technique through online distribution of the questionnaire.

2.4 Study Instrument

Data were collected using a structured self-administered questionnaire designed according to the objectives of the study. The questionnaire comprised three sections. The first section collected socio-demographic characteristics including age, gender, educational qualification, and occupation. The second section assessed participants' knowledge regarding the use of Artificial Intelligence for obtaining healthcare information and supporting healthcare decision-making. The third section evaluated participants' attitudes towards AI in healthcare using a three-point Likert scale (Agree, Neutral, and Disagree). Additional questions assessed participants' trust in AI-generated health information,

previous use of AI for health-related purposes, verification of AI-generated information, and willingness to use AI in the future.

2.5 Data Collection Procedure

Prior to data collection, informed consent was obtained electronically from all participants. The questionnaire was distributed online using Google Forms through various digital communication platforms. Participants completed the questionnaire anonymously and voluntarily. Adequate instructions were provided before questionnaire completion, and confidentiality of all responses was ensured. After completion of data collection, questionnaires were reviewed for completeness before data entry into the master data sheet for statistical analysis.

2.6 Statistical Analysis

The collected data were coded, organized, and analyzed using appropriate descriptive and inferential statistical methods. Descriptive statistics including frequency, percentage, mean, median, and standard deviation were used to summarize demographic characteristics, knowledge, attitudes, and other study variables. The Chi-square test was applied to determine the association between selected socio-demographic variables and knowledge and attitude regarding the use of Artificial Intelligence in healthcare. Statistical significance was considered at a p-value of less than 0.05.

2.7 Ethical Considerations

Participation in the study was voluntary, and electronic informed consent was obtained from all participants before data collection. Participants were informed about the objectives of the study, assured that their responses would remain anonymous and confidential, and informed that the collected data would be used solely for research purposes. Personal identifiers were not collected, and participants were free to withdraw from the study at any stage before submission of the questionnaire.

3. RESULTS

A total of 223 participants successfully completed the online questionnaire and provided informed consent before participation in the study. All completed questionnaires were included in the final analysis, resulting in a response completion rate of 100% for submitted responses. The study evaluated the participants' demographic characteristics, awareness, knowledge, attitudes, trust, and utilization of Artificial Intelligence (AI) for obtaining healthcare information and supporting healthcare decision-making.

3.1 Demographic Characteristics of the Participants

A total of 223 participants completed the online questionnaire and were included in the final analysis. The demographic profile of the respondents is presented in Table 1.

The study population mainly consisted of young adults. Participants aged 18–20 years and 21–30 years each accounted for 37.2% of the total sample. Smaller proportions belonged to the 31–40 years (8.1%), 41–50 years (7.6%), and above 50 years (9.9%) age groups. The larger representation of younger adults may reflect their greater familiarity with digital technologies and increased use of AI-based applications.

Female participants made up 68.6% of the study population, while 31.4% were male. This distribution indicates a higher participation of females in the present study.

More than half of the respondents (54.3%) were undergraduate students, followed by postgraduates (21.1%). Participants who had completed higher secondary education (10th/12th) accounted for 20.6%, whereas only 4.0% had completed a doctoral degree.

With respect to occupation, students formed the largest group (59.2%), followed by employed individuals (22.4%). Homemakers and self-employed/business participants each represented 8.1% of the sample, while a small proportion (2.2%) belonged to other occupations.

The demographic profile shows that the study mainly included educated young adults, providing a suitable population for assessing awareness and perceptions regarding the use of Artificial Intelligence in healthcare.

Table 2: Sociodemographic Characteristics of the Participants (N = 223).

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	18–20	83	37.2
	21–30	83	37.2
	31–40	18	8.1
	41–50	17	7.6
	Above 50	22	9.9
Gender	Male	70	31.4
	Female	153	68.6
Educational Qualification	10th/12th	46	20.6
	Undergraduate	121	54.3
	Postgraduate	47	21.1
	Doctorate	9	4.0
Occupation	Student	132	59.2
	Employed	50	22.4
	Homemaker	18	8.1
	Self-employed	18	8.1
	Others	5	2.2

3.2 Awareness of Artificial Intelligence in Healthcare

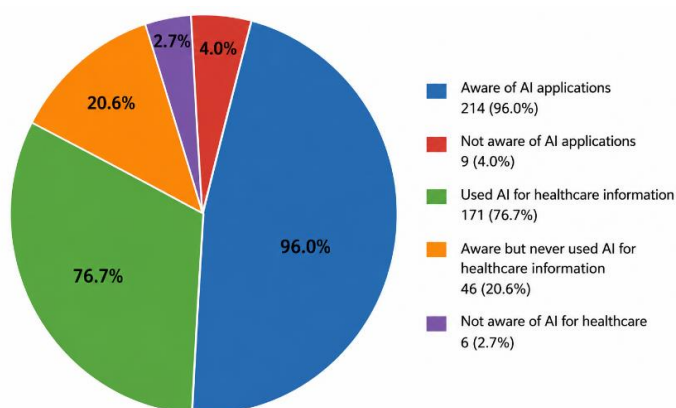
Participants were asked about their awareness of AI-powered applications such as ChatGPT, Gemini, Siri, and Copilot. The findings showed that awareness of AI was very high among the respondents. Almost all participants (96.0%) reported that they were familiar with AI applications, while only 4.0% stated that they were not aware of these technologies.

Participants were also asked whether they knew that AI could be used to obtain healthcare information. More than three-fourths (76.7%) reported that they were aware of this feature and had already used AI for health-related purposes. About one-fifth (20.6%) knew about AI but had never used it for healthcare information. Only 2.7% reported that they were neither aware of nor had used AI for healthcare purposes.

These findings suggest that AI has become widely recognized among the general population. The high level of awareness may be linked to the growing popularity of AI-powered applications and their easy availability through smartphones and the internet.

Table 3: Awareness of Artificial Intelligence in Healthcare (N = 223).

Variable	Response	Frequency (n)	Percentage (%)
Awareness of AI applications	Yes	214	96.0
	No	9	4.0
Awareness of AI use for healthcare information	Yes	171	76.7
	Aware but never used	46	20.6
	Not aware	6	2.7

**Figure 1: Awareness of Artificial Intelligence Applications Among Participants.**

3.3 Knowledge Regarding the Use of Artificial Intelligence in Healthcare

Participants' knowledge about AI was assessed using questions related to its usefulness, limitations, and role in healthcare.

Nearly seven out of ten participants (69.1%) agreed that AI could help explain diseases and symptoms in an understandable manner. About one-fourth (25.1%) were unsure, while only 5.8% disagreed. This shows that most respondents recognized the educational value of AI in helping users understand common health conditions.

When asked whether AI could sometimes provide incorrect or misleading health information, 61.9% answered correctly by agreeing with the statement. Around 26.9% were uncertain, whereas 11.2% believed that AI-generated information was always reliable. This finding highlights that although participants were generally aware of AI's limitations, some misconceptions still existed.

A large majority (71.3%) believed that AI-generated health information should always be verified using reliable medical sources or by consulting a healthcare professional before making healthcare decisions. Only 17.0% were uncertain, and 11.7% disagreed with this statement.

The responses indicate that participants had a good understanding of both the strengths and limitations of AI. While they appreciated the convenience of AI in providing health information, they also recognized the importance of professional medical advice before making decisions related to their health.

Table 4: Knowledge Regarding Artificial Intelligence in Healthcare.

Knowledge Statement	Agree (%)	Neutral (%)	Disagree (%)
AI can explain diseases and symptoms	69.1	25.1	5.8
AI may sometimes provide incorrect healthcare information	61.9	26.9	11.2
AI-generated healthcare information should be verified before use	71.3	17.0	11.7

3.4 Attitudes Towards the Use of Artificial Intelligence in Healthcare

Participants' attitudes towards the use of Artificial Intelligence (AI) in healthcare were assessed using statements related to its usefulness, role in healthcare, privacy concerns, and future use. The responses showed that participants generally viewed AI as a useful technology while recognizing the importance of professional medical supervision.

More than half of the participants (56.1%) agreed that AI should be used to support healthcare professionals rather than replace them. Around 31.8% remained neutral, while 12.1% disagreed with the statement. These findings show that respondents appreciated the benefits of AI but believed that important healthcare decisions should continue to be made by qualified healthcare professionals.

Participants were also asked about the privacy and security of personal health information while using AI applications. More than half (57.4%) expressed concern about the safety of their personal health data. About 30.0% neither agreed nor disagreed, whereas 12.6% did not consider privacy to be a major concern. These responses indicate that protecting personal health information remains an important issue for many AI users.

The study also assessed participants' willingness to use AI for healthcare information in the future. Nearly half of the respondents (47.1%) expressed their willingness to continue using AI for health-related purposes. About 39.0% were unsure, while 13.9% were not willing to use AI in the future. Although many participants were open to using AI, some remained cautious, possibly because of concerns about the reliability of AI-generated information and data privacy.

Taken together, these findings suggest that participants had a positive attitude towards AI in healthcare. Most respondents viewed AI as a useful source of healthcare information but preferred that it should complement healthcare professionals rather than replace them.

Table 5: Attitudes Towards the Use of Artificial Intelligence in Healthcare.

Attitude Statement	Agree (%)	Neutral (%)	Disagree (%)
AI should support healthcare professionals rather than replace them	56.1	31.8	12.1
Concern regarding privacy and confidentiality	57.4	30.0	12.6
Willingness to continue using AI in healthcare	47.1	39.0	13.9

3.5 Use of Artificial Intelligence for Healthcare Information

The study explored the different ways in which participants used AI to obtain healthcare information. The responses showed that AI was being used for a wide range of health-related purposes, indicating its growing role in everyday healthcare information seeking.

The highest use of AI was reported for understanding laboratory reports, with 77.1% of participants stating that they had used AI to interpret laboratory investigations. Only 22.9% had never used AI for this purpose. This suggests that many people rely on AI to simplify medical terminology and help them understand laboratory findings.

A large proportion of respondents (74.9%) had used AI to obtain information related to mental health, while 25.1% had never used it. This finding highlights the increasing use of AI as a readily available source of information for mental well-being and emotional support.

About 71.7% of participants reported using AI for diet and nutrition advice, compared with 28.3% who had never used it for this purpose. This shows that AI is commonly used to obtain guidance on healthy eating habits and lifestyle modifications.

More than two-thirds of the respondents (68.6%) used AI to obtain exercise and fitness guidance, while 31.4% had not used AI for exercise-related information. This finding reflects the growing interest in AI-supported healthy lifestyle practices.

The use of AI for medication-related information was also common, with 67.3% of participants reporting that they had used AI to learn about medicines, whereas 32.7% had never used it for this purpose. AI appears to be a convenient source for obtaining general information about medications, although professional advice remains essential before starting or changing any treatment.

More than half of the respondents used AI to obtain disease-related information (57.4%) and to understand symptoms (55.2%) before seeking medical consultation. These findings indicate that AI is increasingly being used as an initial source of health information before approaching healthcare professionals.

The responses clearly show that participants used AI for a variety of healthcare needs, particularly to understand health conditions, laboratory reports, medications, and healthy lifestyle practices. At the same time, many participants recognised that AI should be used to support healthcare decisions rather than replace professional medical advice.

Table 6: Areas in Which Participants Used Artificial Intelligence for Healthcare Information.

Purpose of AI Use	Yes (%)	No (%)
Understanding laboratory reports	77.1	22.9
Mental health information	74.9	25.1
Diet and nutrition advice	71.7	28.3
Exercise and fitness guidance	68.6	31.4
Medication-related information	67.3	32.7
Disease-related information	57.4	42.6
Understanding symptoms	55.2	44.8

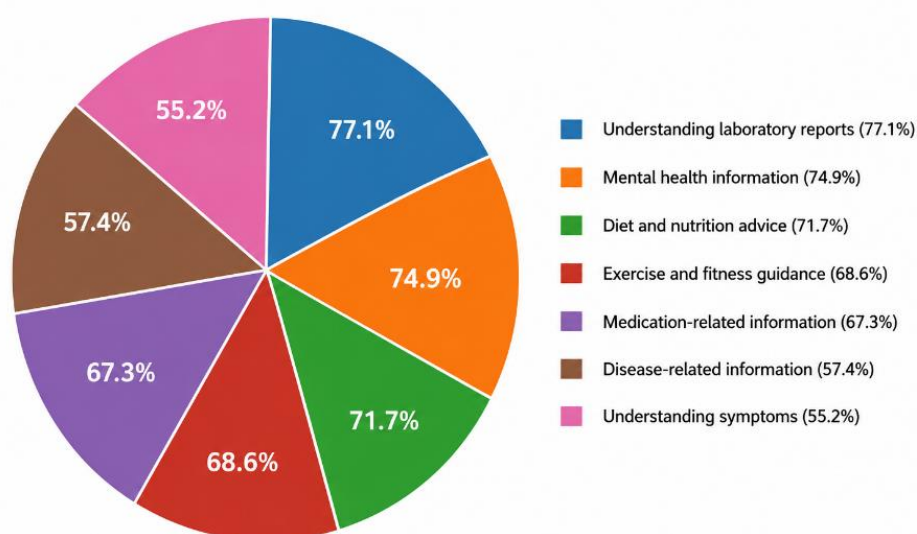


Figure 2: Purposes for Which Participants Used Artificial Intelligence for Healthcare Information.

3.6 Reasons for Using Artificial Intelligence

Participants were asked about the reasons that encouraged them to use AI for healthcare information. The responses suggest that convenience and ease of use played an important role in the growing use of AI applications.

The most frequently reported reason was the ability to receive quick responses, with 38.1% of participants selecting this option. Easy accessibility (11.7%) and curiosity (11.2%) were the next most common reasons for using AI. A few participants also reported using AI because it was available at any time, easy to understand, and helpful for obtaining general health information.

The responses suggest that participants preferred AI because it was simple to access and provided health-related information within a short period of time. These features make AI a convenient option for people seeking general healthcare information, particularly when immediate information is needed.

Table 7: Reasons for Using Artificial Intelligence for Healthcare Information.

Reason	Percentage (%)
Quick responses	38.1
Easy accessibility	11.7
Curiosity	11.2
Available at any time	Reported by a small proportion of participants
Easy to understand	Reported by a small proportion of participants
Helpful for general healthcare information	Reported by a small proportion of participants

3.7 Verification of AI-Generated Healthcare Information

The study assessed whether participants verified AI-generated healthcare information before using it to make health-related decisions. This aspect is important because AI can provide general health information, but its recommendations may not always be accurate or suitable for every individual.

Nearly half of the participants (48.9%) reported that they always verified the information provided by AI with a healthcare professional before following it. About 19.7% stated that they sometimes verified the information, while 14.3% reported rarely verifying AI-generated advice.

These findings suggest that although participants found AI useful for obtaining health information, they did not rely on it completely. Many preferred to confirm AI-generated information with qualified healthcare professionals before making decisions related to their health. This cautious approach reflects a good understanding of both the benefits and limitations of AI in healthcare.

The findings also support the view that AI is mainly considered a supportive source of information rather than a replacement for professional medical consultation. Participants appeared to value AI for its convenience while recognizing the importance of expert medical advice, particularly for diagnosis, treatment, and medication-related decisions.

Table 8: Verification of AI-Generated Healthcare Information.

Verification Practice	Percentage (%)
Always verify with a healthcare professional	48.9
Sometimes verify	19.7
Rarely verify	14.3
Never verify / Other responses	Remaining participants

3.8 Participants' Opinions on the Use of AI in Healthcare

Participants were given an opportunity to share their views and suggestions regarding the use of Artificial Intelligence in healthcare. Their responses provided useful insights into how the general population perceives AI and its future role in healthcare services.

Many participants described AI as a useful technology that can improve access to healthcare information and help people better understand their health conditions. Respondents appreciated the ability of AI to provide quick explanations, simplify medical information, and support health education. Several participants believed that AI could reduce the time required to obtain basic healthcare information and improve public awareness of common diseases and healthy lifestyle practices.

A common opinion expressed by participants was that AI should be used alongside healthcare professionals rather than as a substitute for them. Many respondents felt that healthcare professionals should continue to make final clinical decisions because they can consider the patient's medical history, physical examination, and other factors that AI may not fully understand.

Some participants also highlighted concerns regarding the possibility of incorrect information, privacy of personal health data, and ethical issues related to AI. They recommended that AI systems should be continuously updated with reliable medical information and that users should always consult healthcare professionals before acting on AI-generated advice.

The responses indicate that participants were optimistic about the future use of AI in healthcare but expected it to be implemented responsibly, with appropriate safeguards to protect patient safety and confidentiality.

Table 9: Participants' Opinions Regarding the Use of Artificial Intelligence in Healthcare.

Theme Identified from Participant Responses	Summary of Responses
Positive perception of AI	AI is a useful source of healthcare information and improves access to health education.
Supportive role of AI	AI should assist healthcare professionals but should not replace them.
Importance of professional consultation	Medical advice generated by AI should be confirmed with qualified healthcare professionals.
Privacy and confidentiality	Protection of personal health information should be ensured while using AI.
Ethical use of AI	AI systems should be used responsibly with appropriate regulations and continuous monitoring.
Future use of AI	Participants supported wider use of AI provided patient safety and professional supervision are maintained.

3.9 Association Between Sociodemographic Variables and Knowledge, Attitudes, and Practices Related to AI

The association between selected sociodemographic variables and participants' knowledge, attitudes, and practices regarding the use of Artificial Intelligence in healthcare was analysed using the Chi-square test. A p-value less than 0.05 was considered statistically significant.

The analysis showed that age was significantly associated with the use of AI for obtaining healthcare information ($\chi^2 = 24.112$, $p = 0.002$). Younger participants reported greater use of AI applications than older participants. This may be

because younger individuals are generally more familiar with digital technologies and frequently use online platforms to search for health information.

Age was also significantly associated with taking medicines based only on AI-generated advice without consulting a healthcare professional ($\chi^2 = 16.684$, $p = 0.034$). This finding suggests that healthcare decision-making practices differed among age groups. However, no significant association was found between age and general awareness of AI applications ($p = 0.909$), indicating that awareness of AI was high across all age groups.

Gender showed a significant association with awareness of AI applications ($\chi^2 = 5.419$, $p = 0.020$). A significant relationship was also observed between gender and participants' knowledge that AI can explain diseases and symptoms ($\chi^2 = 9.186$, $p = 0.010$). Another significant association was found between gender and awareness that AI-generated healthcare information may sometimes be inaccurate ($\chi^2 = 18.392$, $p < 0.001$). These findings suggest that knowledge and awareness differed slightly between male and female participants.

Educational qualification was significantly associated with the practice of verifying AI-generated healthcare information before using it ($\chi^2 = 21.009$, $p = 0.013$). Participants with higher educational qualifications were more likely to verify AI-generated information with healthcare professionals. No significant association was observed between education and most of the remaining knowledge or attitude variables.

The findings suggest that demographic factors influenced certain aspects of AI use and healthcare information-seeking behaviour. Although differences were observed in awareness, knowledge, and verification practices, positive attitudes towards AI were seen across most demographic groups.

Table 10: Association Between Selected Sociodemographic Variables and Knowledge, Attitudes, and Utilization of Artificial Intelligence in Healthcare (Chi-square Test).

A. Association of Age with Study Variables

DV	IV	Chi-square value (χ^2)	df	p-value
Age	Are you aware about Artificial Intelligence (ChatGPT, Gemini, Siri, Copilot, etc.)?	1.007 ^a	4	0.909
	Are you aware that AI-powered tools (e.g., ChatGPT, Gemini, Siri, etc.) can provide health-related information, and have you ever used such tools for this purpose?	24.112 ^a	8	0.002
	Do you think AI can help explain diseases and symptoms?	10.359 ^a	8	0.241
	Do you know that AI may sometimes provide incorrect or inaccurate health information?	13.304 ^a	8	0.102
	Are you aware that AI-generated health information should be verified from reliable medical sources?	7.566 ^a	8	0.477
	Have you ever taken any medicine based only on AI advice without consulting a healthcare professional?	16.684 ^a	8	0.034
	AI should be used to assist healthcare professionals in making better healthcare decisions rather than replacing them.	12.671 ^a	8	0.124
	I am concerned about the privacy and security of my health information when using AI tools.	2.349 ^a	8	0.968
	I have a positive attitude toward the use of AI in healthcare.	13.306 ^a	8	0.102
	I would be willing to use AI tools for obtaining health-related information in the future.	13.649 ^a	8	0.091
	For what purposes have you used AI? (Select all that apply)	318.886 ^a	316	0.444
	What is the main reason you use AI for health information? (Select all that	72.821 ^a	76	0.582

	apply)			
	When AI provides health-related advice, how often do you verify the information with a healthcare professional before following it?	9.205 ^a	12	0.685
	Any comments or suggestions regarding the use of AI in healthcare?	621.055 ^a	580	0.116

B. Association of Gender with Study Variables

DV	IV	Chi-square value (χ^2)	df	P-value
Gender	Are you aware about Artificial Intelligence (ChatGPT, Gemini, Siri, Copilot, etc.)?	5.419 ^a	1	0.020
	Are you aware that AI-powered tools (e.g., ChatGPT, Gemini, Siri, etc.) can provide health-related information, and have you ever used such tools for this purpose?	3.939 ^a	21	0.139
	Do you think AI can help explain diseases and symptoms?	9.186 ^a	2	0.010
	Do you know that AI may sometimes provide incorrect or inaccurate health information?	18.392 ^a	2	<0.001
	Are you aware that AI-generated health information should be verified from reliable medical sources?	4.289 ^a	2	0.117
	Have you ever taken any medicine based only on AI advice without consulting a healthcare professional?	1.461 ^a	2	0.482
	AI should be used to assist healthcare professionals in making better healthcare decisions rather than replacing them.	0.619 ^a	2	0.734
	I am concerned about the privacy and security of my health information when using AI tools.	5.421 ^a	2	0.067
	I have a positive attitude toward the use of AI in healthcare.	2.842 ^a	2	0.241
	I would be willing to use AI tools for obtaining health-related information in the future.	1.004 ^a	2	0.605
	For what purposes have you used AI? (Select all that apply)	86.710 ^a	79	0.259
	What is the main reason you use AI for health information? (Select all that apply)	29.293 ^a	19	0.063
	When AI provides health-related advice, how often do you verify the information with a healthcare professional before following it?	4.932 ^a	3	0.177
	Any comments or suggestions regarding the use of AI in healthcare?	144.906 ^a	145	0.487

C. Association of Educational Qualification with Study Variables

DV	IV	Chi-square value (χ^2)	df	P-value
Educational Qualification	Are you aware about Artificial Intelligence (ChatGPT, Gemini, Siri, Copilot, etc.)?	3.720 ^a	3	0.293
	Are you aware that AI-powered tools (e.g., ChatGPT, Gemini, Siri, etc.) can provide health-related information, and have you ever used such tools for this purpose?	3.741 ^a	6	0.712
	Do you think AI can help explain diseases and symptoms?	4.760 ^a	6	0.575
	Do you know that AI may sometimes provide incorrect or inaccurate health information?	6.712 ^a	6	0.348
	Are you aware that AI-generated health information should be verified from reliable medical sources?	4.626 ^a	6	0.593
	Have you ever taken any medicine based only on AI advice without consulting a healthcare professional?	6.118 ^a	6	0.410
	AI should be used to assist healthcare professionals in making better healthcare decisions rather than replacing them.	2.706 ^a	6	0.845
	I am concerned about the privacy and security of my health information when using AI tools.	3.322 ^a	6	0.767
	I have a positive attitude toward the use of AI in healthcare.	3.085 ^a	6	0.798
	I would be willing to use AI tools for obtaining health-related information in the future.	4.062 ^a	6	0.668
	For what purposes have you used AI? (Select all that apply)	231.557 ^a	237	0.588
	What is the main reason you use AI for health information?	44.049 ^a	57	0.898

	(Select all that apply)			
	When AI provides health-related advice, how often do you verify the information with a healthcare professional before following it?	21.009 ^a	9	0.013
	Any comments or suggestions regarding the use of AI in healthcare?	445.091 ^a	435	0.359

3.10 Summary of the Findings

The present study explored the knowledge, attitudes, trust, and use of Artificial Intelligence for healthcare information and healthcare decision-making among the general population.

The findings showed that awareness of AI was very high among the participants, and many had already used AI applications to obtain healthcare information. AI was commonly used to understand laboratory reports, obtain information on mental health, diet and nutrition, exercise, medications, diseases, and symptoms. Participants mainly preferred AI because it was easy to access and provided quick responses.

Most participants demonstrated good knowledge regarding the advantages and limitations of AI. They recognized that AI could improve access to healthcare information but also understood that AI-generated information should be verified before making healthcare decisions.

Participants generally expressed a positive attitude towards the use of AI in healthcare. They believed that AI could support healthcare professionals by improving access to information and increasing public awareness. At the same time, they emphasized that AI should not replace healthcare professionals and that final healthcare decisions should always involve qualified medical experts.

The statistical analysis showed that age, gender, and educational qualification were associated with selected aspects of AI awareness, use, and verification practices. Despite these differences, acceptance of AI was generally high among the study participants.

Taken together, the findings indicate that AI has become an important source of healthcare information for many individuals. Its successful use in healthcare will depend on accurate information, protection of patient privacy, ethical implementation, and continued involvement of healthcare professionals in clinical decision-making.

4. DISCUSSION

The present study assessed the knowledge, attitudes, trust, and willingness of the general population regarding the use of Artificial Intelligence (AI) for obtaining health information and supporting healthcare decision-making. The findings indicate that participants possessed good awareness of AI technologies and generally accepted their use as a supportive tool in healthcare. Most respondents were familiar with AI platforms such as ChatGPT, Gemini, Siri, and Copilot and recognized their ability to provide health-related information. At the same time, participants understood that AI-generated information may not always be accurate and should be verified through reliable medical sources, reflecting a balanced understanding of both the benefits and limitations of AI. The study identified significant associations between selected socio-demographic variables and AI-related knowledge and practices. Age was significantly associated with awareness and use of AI for healthcare information and with the practice of taking medicines based solely on AI advice. Gender showed significant associations with awareness of AI, the belief that AI can explain diseases and symptoms, and awareness that AI may sometimes provide inaccurate information. Education was significantly associated only with

verifying AI-generated health information before following it. These findings suggest that demographic characteristics influence awareness and responsible use of AI, although positive attitudes towards AI were observed across different groups. Participants demonstrated a favourable attitude towards the integration of AI into healthcare, with most believing that AI should assist healthcare professionals rather than replace them. This reflects growing confidence in AI as a supportive technology while recognizing that clinical judgement and final healthcare decisions should remain with qualified healthcare professionals. Although participants expressed willingness to continue using AI for obtaining health-related information, they preferred professional consultation before making important medical decisions. Concerns regarding the accuracy of AI-generated information and the privacy of personal health data also contributed to a cautious level of trust.

The findings of the present study suggest that AI has considerable potential to improve access to health information by providing quick, convenient, and easily accessible support. However, its effective use depends on public awareness of its limitations and the continued involvement of healthcare professionals in diagnosis and treatment decisions. Promoting digital health literacy and encouraging verification of AI-generated information through reliable medical sources will help ensure the safe, ethical, and responsible integration of AI into healthcare.

5. CONCLUSION

The present study concludes that the general population demonstrated good knowledge and a positive attitude towards the use of Artificial Intelligence (AI) for obtaining health information and supporting healthcare decision-making. Most participants were aware of AI-based tools such as ChatGPT, Gemini, Siri, and Copilot and recognized their usefulness in providing quick and easily accessible health-related information. At the same time, respondents acknowledged that AI-generated information may not always be accurate and should be verified through reliable medical sources before making healthcare decisions. Participants considered AI as a supportive tool that can assist healthcare professionals rather than replace them, reflecting a balanced perception of its role in healthcare. Significant associations were observed between age, gender, and selected knowledge and practice variables, while education showed a significant association only with verification of AI-generated health information. Although participants expressed willingness to continue using AI for health-related purposes, they preferred consulting healthcare professionals before relying on AI-generated advice for diagnosis or treatment. These findings suggest that AI has considerable potential to improve access to health information and promote digital healthcare; however, responsible use, public awareness, and professional guidance remain essential. Strengthening digital health literacy and encouraging verification of AI-generated information will help ensure the safe, ethical, and effective integration of AI into healthcare practice.

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