Perception of Nursing Students regarding Artificial Intelligence in Health Care

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Abstract

Background: Artificial intelligence in healthcare has opened new avenues for enhancing patients care, optimizing healthcare operations, and advancing public health initiatives. **Aim of study** was to assess the perception of nursing students regarding artificial intelligence in health care. **Research design:** A descriptive research design was utilized to conduct this study. **Setting:** The study was conducted at Faculty of Nursing, Benha University, Benha City, Egypt. **Sample:** Simple random sample was used; the total sample included 300 students. **Tools: Two online tools** were used**, Tool I:** A questionnaire which included 2 parts**: Part I: A):** It was concerned with socio demographic characteristics of nursing students and their technology use. **B):** It was concerned with the knowledge of nursing students regarding artificial intelligence in health care. **Tool II):** It was concerned with the attitude of nursing students regarding artificial intelligence in health care. **Results:** 28.7% of studied nursing students had good knowledge about artificial intelligence in health care, while 36.0% of them had positive attitude regarding artificial intelligence in health care. **Conclusion:** Approximately two fifths of studied nursing students had average knowledge regarding artificial intelligence in health care, while almost two thirds of them had negative attitude regarding artificial intelligence in health care. Also, there was a positive correlation between nursing students` total knowledge level and their total attitude level regarding artificial intelligence in health care. **Recommendations:** Health educational programs should be developed and implemented for nursing students to enhance their perception regarding artificial intelligence in health care.

Keywords: Perception, Nursing Students, Artificial Intelligence, Health Care

Introduction

Nursing students play a vital role in healthcare by actively learning and contributing to patient care. As future nurses, nursing students develop essential clinical skills, critical thinking abilities, and professional values while supporting healthcare teams and advocating for patients. Nursing students who represent the future stakeholders in healthcare is pivotal in both the development and implementation of artificial intelligence solutions within the healthcare industry. Nursing students can remotely monitor patients' conditions in the clinical area via artificial intelligence-enabled wearable devices, ensuring that these programs help artificial intelligence-powered catboats and virtual assistant communicate with patients, provide information and support which enhance patient engagement and education **(Khaled & Elborai, 2024; Derakhshanian et al., 2024).**

Nursing students' perception to use Artificial Intelligence (AI) in practice is an important predictor of successful integration because AI demonstrates the readiness and willingness to adopt AI tools into the future clinical roles. Various factors influence the

intention to use artificial intelligence, including knowledge, attitudes, and views of technology, as well as exposure to artificial intelligence in educational contexts. However, perception levels vary greatly among students, highlighting the importance of focused educational interventions that address individual factors. Understanding these factors is critical for creating artificial intelligence-focused curriculum that helps nursing students acquire positive attitudes about AI adoption **(Al Omari et al., 2024).**

Artificial intelligence technology is set to transform healthcare by easing the burden on nursing staff, supporting the creation of treatment plans, automating routine tasks, and enhancing teamwork among healthcare providers. In the healthcare sector, AI involves the use of intelligent tools, systems, and algorithms to support nurses across various responsibilities, from direct patient care to administrative functions. These applications cover a broad range, including electronic health record management, medication administration, remote nursing (telenursing), and predictive analytics for anticipating issues such as falls and pressure ulcers **(Matheny et al., 2025; Pennisi et al., 2025; Rony et al., 2024[b]).**

The global artificial intelligence healthcare market is estimated to be valued at approximately 36.96 billion in 2024, with forecasts suggesting it could reach around 613.81 billion by 2034, reflecting a compound annual growth rate of 36.83% from 2024 to 2034. Many studies address these knowledge gaps, balance the 58% recognition of artificial intelligence benefits against the 42% concern about risks, and influence the 75% of nursing programs that currently lack artificial intelligence-related content, thereby promoting better adoption and utilization of artificial intelligence tools in healthcare **(Abd El-Razek et al., 2025).**

Despite the potential benefits of AI technologies in patient care, the adoption in health care has raised concerns and sparked debate among nurses. There is an apprehension that AI could threaten the ethical foundations of care and potentially replace essential nursing functions. The integration of AI into the health care field has amplified these worries. A growing issue in recent discussions is the fear that technology may reduce direct human interaction, thereby undermining ethical caregiving and creating uncertainty around the transparency and quality of health care **(Yılmaz et al., 2025).**

Community Health Nurses (CHNs) play a vital role in promoting literacy in generative artificial intelligence. CHNs are responsible for continuously updating knowledge, incorporating generative artificial intelligence concepts into nursing education, and encouraging critical thinking about its use in healthcare. This includes evaluating the distinct features, benefits, and limitations of different artificial intelligence platforms. CHNs help enhance nursing students' abilities to use smart devices for monitoring health, tracking and managing vital signs, designing patient-centered programs that support medication adherence, and delivering specialized healthcare services. To support this effort, educational institutions need to invest in generative artificial intelligence technologies and faculty training **(Simms, 2025).**

Significance of the study:

Egypt's AI healthcare market was estimated at around $30.6 million, with forecasts suggesting significant growth to $410 million by 2032, representing a compound annual growth rate of 33.75%. As part of Egypt's Vision 2030, the country has

developed a national AI strategy designed to boost AI's, with a focus on sectors such as healthcare, education, and transportation, aims to increase AI's contribution to over 7.7% of the gross domestic product. Additionally, the Egypt Health Care Authority has introduced AI-powered systems, including electronic health records and radiology information systems, to enhance diagnostic accuracy and improve patient care **(Arab Federation for Digital Economy, 2021; Abd El-Razek et al., 2025).**

Moreover, the absence of comprehensive regulatory frameworks for AI in healthcare creates uncertainty regarding standards, accountability, and ethical issues. The integration of AI technologies into existing healthcare systems, which often rely on older infrastructure and processes, can be complicated, expensive, and time-consuming. Additionally, AI algorithms need vast amounts of data to be trained and refined, but data availability is often restricted due to fragmented healthcare systems, inconsistent data formats, or limited access to high-quality data **(Alajrab et al., 2025).** So that, the researchers found that it is important to conduct the study to assess perception of nursing students regarding artificial intelligence in health care.

Aim of study

This study aimed to assess the perception of nursing students regarding artificial intelligence in health care.

Research questions:

1- What is the knowledge of nursing students regarding artificial intelligence in health care?
2- What is the attitude of nursing students regarding artificial intelligence in health care?
3- Is there a correlation between nursing students' total knowledge and total attitude regarding artificial intelligence?

Subjects and method

Research design

A descriptive research design was utilized to conduct this study.

Setting

This study was conducted at Faculty of Nursing, Benha University, Benha City, Egypt.

Sampling

A simple random sample of the fourth-year undergraduate nursing students of Faculty of Nursing, Benha University through the academic year 2023/2024, through determination of the total number of fourth year nursing students (N=1200) the total sample included n=300 students. The sample size was calculated according to statistical sample equation **(Yamane, 1967).**

$$n = \frac{N}{1 + N(e)^2}$$

N= Total number of students of the fourth year in 2023/2024=1200
e = is coefficient factor=.05
n = sample size=300

Tools of data collection: Two tools were used to collect the data (online tools):

Tool I: A questionnaire which was comprised of two parts:

Part I: This part included two items:

A: Socio- demographic characteristics of studied nursing students. It included 9 closed ended questions: (age, sex, place of residence, marital status, father's occupation, mother's occupation, family monthly income, father's educational level and mother's educational level).

B: Studied nursing students` technology use it included 3 closed ended questions as type of mobile phone used, time available to connect

to the internet/ day and presence of difficulty connecting to the internet.

Part II: Knowledge of studied nursing students regarding artificial intelligence in health care which consisted of 23 closed ended questions.

Scoring system:

The scoring system is graded according to the questionnaire items. The scoring system for studied nursing students` knowledge was calculated as follows 2 score for correct complete answer, 1 score for incomplete correct answer, and 0 for don't know. For each area of knowledge, the score of the questions was summed up and the total divided by the number of the questions, which converted into a percentage score. The total knowledge scores= (44 points) which were further categorized:

N.B: Source of information not included in scoring system.

- Good knowledge→ if the total score of knowledge was ≥ 75% (≥33 points)
- Average knowledge → if the total score was 50<75% (22 < 33 points)
- Poor knowledge → if the total score was < 50% (< 22 points).

Tool II: Was concerned to assess the students' attitude level regarding artificial intelligence in health care using Likert scale adapted from **(Lukić et al., 2023; Sheela, 2022)**, and consisted of 12 items.

Scoring system: The scoring system was graded according to the questionnaire items. The scoring system for attitude was calculated as 2 scores for agree and 1 scores for uncertain, while 0 for disagree. For each area of attitude, the score of the questions was summed up and the total divided by the number of the questions, which converted into a percent score. The total attitude scores 24 points which were further categorized:

- **Positive attitude**→ if the total score of attitude was ≥60% (≥14points)
- **Negative attitude**→ if the score was <60% (<14points)

Tools validity

The tools validity was done by Five members of Faculty's Staff Nursing- Benha University Experts from the Community Health Nursing Specialties who reviewed the tools for clarity, relevance, comprehensiveness, applicability and easiness for implementation and according to their opinion minor modifications were carried out.

Tools Reliability

The reliability of the tools was done by Cornbrash's Alpha coefficient test that developed by Lee Cronbach in 1951 which revealed that each of the two tools consisted of relatively homogenous items as indicated by the moderate to high reliability of each tool. The internal consistency of knowledge was =0.89 and attitude was = 0.92.

Ethical consideration:

Approval was obtained from the Research Ethical Committee (REC-CHN-M28 - 11/2/2024) at Faculty of Nursing Benha University to conduct the study and informal consent from all study participants was obtained after explaining the purpose of the study to gain their trust and cooperation. Each student had a choice to continue or withdraw from the study. Privacy and confidentiality were assured. Ethics, values, culture, and beliefs were respected. The data collected was stored in a confidential manner.

Pilot study:

The pilot study was carried out in the end of January 2024 to ascertain the clarity and applicability of the study tools representing 10% (30 nursing students) of total study

participants 300 nursing students. It had also served in estimating the time needed for filling the questionnaires. It ranged between 20-30 minutes to assess perception of nursing students regarding artificial intelligence in health care. No modification was done, so the pilot study included in the study main subjects.

Field work

This study was conducted at Faculty of Nursing at Benha University after the researchers prepared the questionnaire electronically via Google form design and took permission from Vice Dean for Education and Students Affairs and Head of Academic Departments of Community Health Nursing, Psychiatric and Mental Health Nursing. The researchers explained the aim, nature of the study and the method of filling the electronic questionnaire to the students. Oral approval obtained from students after the researchers introduced herself for each student then explained the purpose of the study. The researchers collected the data by distributing the questionnaire link to nursing students and required them to enter the internet and fill it out through the following link: https://docs.google. com/forms/ d/e/ 1F A IpQLSf0Thq 7vrHQ4C5 G kpGtW5KyjUr-g7R FQ 5R WZ eJHt TjhmMpP0g/view form. The process of data collection took about two months started at mid of February 2024 to the mid of April 2024. The process of data collection was two days per week (Sunday and Wednesday) from 9 am to 12 pm to collect data from nursing students. The average time needed was around 20-30 minutes for the group, the average number interviewing students was 17-20 students/day depending on their responses.

Statistical analysis

All data collected were organized, tabulated and analyzed by using the Statistical Package for Social Science (SPSS version 21), which was used frequencies, and percentages for qualitative descriptive data while chi-square coefficient (x^2) was used for relation and person correlation tests. Mean and standard deviation were used for quantitative data, and the Spearman correlation test (r) was employed to assess the relations between the total score of knowledge, and attitude.

The associations between items were considered as the following (p-value):

Highly statistically significance when $p \leq 0.001$**

Statistically Significant when $p < 0.05$*

No significant when $p > 0.05$

Results

Table (1): Shows that; 30.7% of studied nursing students aged from 20 to 21 years old with mean age was 21.34±1.12 years, and 76.3% of them were female. Regarding to place of residence 81.7% of studied nursing students lived in rural areas. 75.0% of studied nursing students were single, 63.7% of studied students` fathers were working, and 53.0% of studied students` mothers weren't working. 58.0% of studied students had enough family income per month. According to educational level, 44.7%, 38.7% of their fathers and mothers had secondary education respectively.

Table (2): Describes that; 68.7% of studied nursing students had sufficient awareness about technology, 49.0% of them used smartphones, 54.7% of them had two hours available to connect to the internet per day and 63.0% of them found difficulty connecting to the internet.

Figure (1): Illustrates that; 40.0% of studied nursing students had average knowledge about artificial intelligence in health care and 31.3% of them had poor knowledge about artificial intelligence in health care.

Figure (2): Illustrates that; 71.0% of studied nursing students obtained their

knowledge about artificial intelligence in health care from social media, while 40.0% of them from medical staff and 32.3% of them from mass media.

Figure (3): Reveals that; 64.0% of studied students had negative attitude regarding artificial intelligence in health care, while 36.0% of them had positive attitude regarding artificial intelligence in health care.

Table (3): Reveals that; there was a positive correlation between studied students` total knowledge level and their total attitude level about artificial intelligence in health care.

Table (1): Distribution of studied nursing students regarding their demographic characteristics (n=300).

Demographic characteristics	No.	%
Age/ years		
20+	92	**30.7**
21+	79	26.3
22+	64	21.3
23+	65	21.7
Mean ±SD = 21.34±1.12		
Sex		
Male	71	23.7
Female	229	**76.3**
Place of residence		
Rural	245	**81.7**
Urban	55	18.3
Marital status		
Single	225	**75.0**
Married	75	25.0
Father`s occupation		
Working	191	**63.7**
Not working	109	36.3
Mother`s occupation		
Working	141	47.0
Not working	159	**53.0**
Family monthly income		
Just enough	174	**58.0**
Not enough	122	40.7
Enough and saving	4	1.3
Father`s educational level		
Can't read and write	25	8.3
Basic education	68	22.7
Secondary education	134	**44.7**
University education and more	73	24.3
Mother`s educational level		
Can't read and write	28	9.3
Basic education	58	19.3
Secondary education	116	**38.7**
University education and more	98	32.7

Table (2): Distribution of studied students regarding their technology use (n=300).

Technology use	No.	%
Type of mobile phone used		
Smartphone	147	**49.0**
Tablet	121	40.3
A smart phone with features	29	9.7
Button phone	3	1.0
Time available to connect to the internet/ day		
Two hours	164	**54.7**
Four hours	96	32.0
More than four hours	40	13.3
Presence of difficulty connecting to the Internet		
Yes	189	**63.0**
No	111	37.0

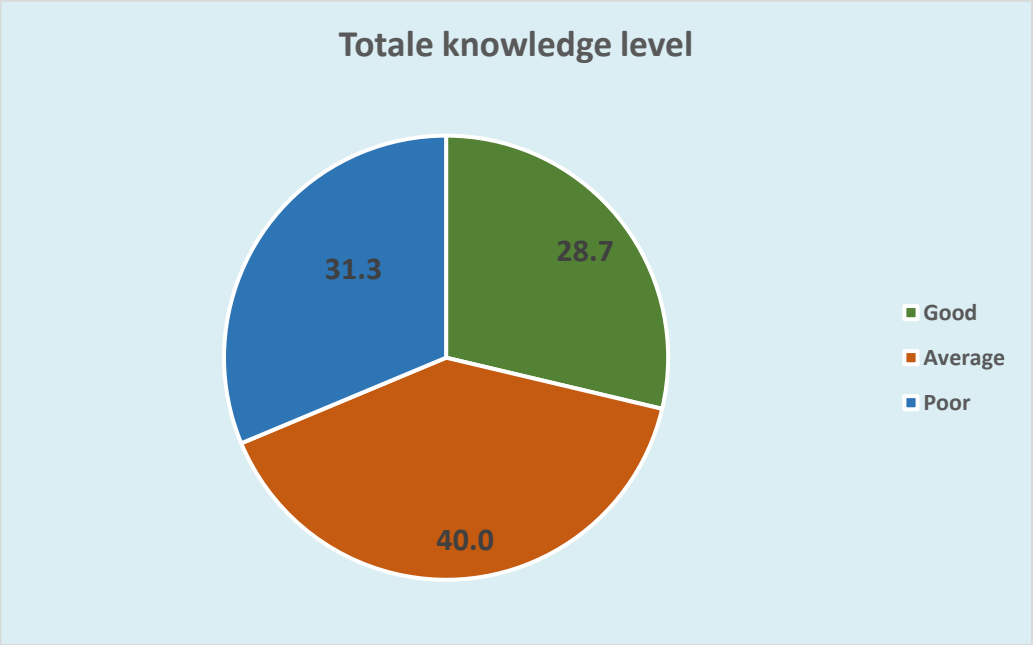

Figure (1): Percentage distribution of studied nursing students regarding their total knowledge level about artificial intelligence in health care (n=300).

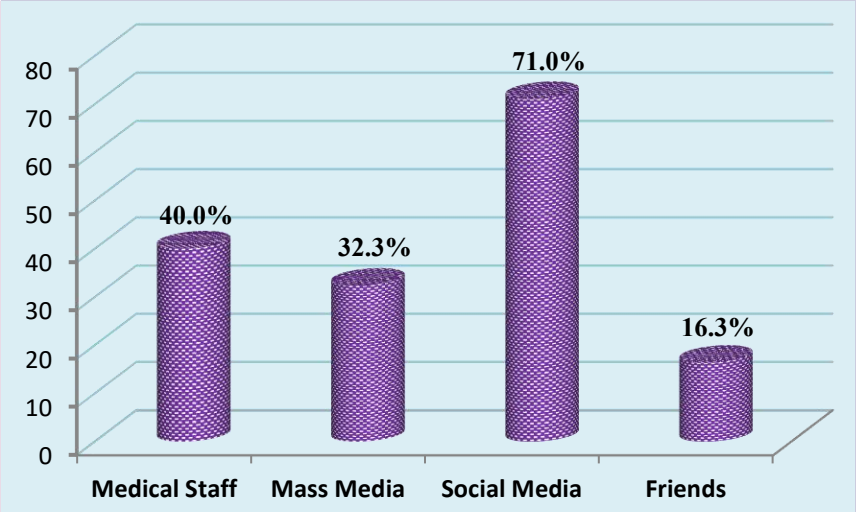

Figure (2): Percentage distribution of studied nursing students regarding their source of information about artificial intelligence in health care (n=300).

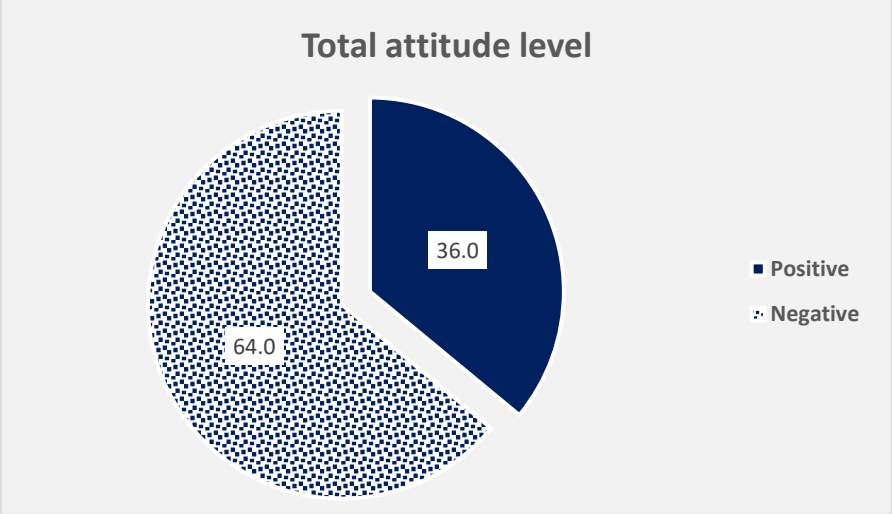

Figure (3): Percentage distribution of studied nursing students regarding their total attitude level about artificial intelligence in health care (n=300).

Table (3): Correlation between total knowledge and total attitude of studied nursing students regarding artificial intelligence in health care (n=300).

Total attitude	Total knowledge	
	r	p-value
	.731	.003*

(*) statistically significant at (p<0.005)

Discussion

Artificial Intelligence is rapidly transforming healthcare and holds immense potential for revolutionizing the field of nursing. Nursing students are future healthcare workers and are important future stakeholders who will play a key role in the development, implementation, and utilization of AI solutions in healthcare. Evaluating current nursing

students' understanding about the scope of AI in healthcare and evaluating the attitude would provide valuable data with which to navigate its efficient integration into healthcare systems in the future **(Ahmad et al., 2023).**

Regarding socio -demographic characteristics of the studied nursing students, the present study finding showed that; less than third of studied nursing students aged from 20 to 21 years old with mean age 21.34±1.12 years. This finding was consistent with **Labrague et al. (2023)[a]**, who studied "Factors influencing student nurses' readiness to adopt artificial intelligence (AI) in their studies and their perceived barriers to accessing AI technology, in USA, (n= 323), and found that; 33.0% of the studied participants aged from 20 to 21 years old with mean age 21.45±1.44 years. This might be due to the criteria of sample selection.

As regards to studied nursing students' sex, the current study demonstrated that more than three quarters of studied nursing students were female. This result was compatible with **Cho & Seo (2024)**, who conducted a study about "Dual mediating effects of anxiety to use and acceptance attitude of artificial intelligence technology on the relationship between nursing students' perception of and intention to use them", in Korea, (n=180) and found that; 85.6% of the studied nursing students were females.

As regards to studied nursing students' place of residence, the present study showed that majority of them were from rural areas. This finding was incongruent with **Alsenany et al. (2024),** who studied "Nursing students' perception and attitudes toward utilization of artificial intelligence in health care", in Jeddah. KSA, (n=206) and found that; 73.3% of studied nursing students were from urban areas. Also, this result contradicted with **Khaled & Elborai (2024),** who studied "Knowledge and attitude of nursing students regarding artificial intelligence", in Egypt, (n=222) and reported that; 68.5% of the studied nursing students lived in urban residents.

Regarding studied nursing students' fathers' and mothers' occupation, the current study showed that; nearly more than three fifths of studied nursing students' fathers were working, and more than half of studied students' mothers weren't working. This study result was in harmony with **Lukić et al. (2023),** who studied "First-year nursing students' attitudes towards artificial intelligence", in Croatia, (n=336) and reported that; 70.4% of the studied nursing students' fathers were working, while 61.1% of their mothers were housewives. However, this finding was opposed to **Labrague et al. (2023)[b],** who studied "Student nurses' attitudes, perceived utilization, and intention to adopt artificial intelligence (AI) technology in nursing practice", in USA, (n=200) and stated that; 88.0% of the studied nursing students' fathers and mothers were working.

As regards to studied students' family monthly income, the current study showed that; more than half of studied nursing students had enough family monthly income. This study finding was inconsistent with **Khatatbeh et al. (2024),** who studied "Challenges of distance learning encountering nursing students after the COVID-19 pandemic", in Jordan, (n=941) and noticed that; 82.9% of the studied nursing students had not enough family income.

Regarding studied nursing students' father and mother education, the study showed that; more than two fifths and more than one third of their fathers and mothers had secondary education respectively. This study findings were incongruent with **Yigit & Acikgoz (2024),** who studied "Evaluation of future nurses' knowledge, attitudes and anxiety

levels about artificial intelligence applications", in Turkey, (n=552) and mentioned that; 92.0% of the studied nursing students' fathers and mothers had university education respectively.

Concerning the studied nursing students' using smartphones, the current study illustrated that; almost half of them used smartphones. This finding agreed with **Khalil et al. (2021),** who studied "Practice and attitude of nursing students towards electronic learning during COVID-19 pandemic", in Saudi Arabia, (n=140) and reported that; 67.1% of studied nursing students used smartphone.

As regards to the time available to connect to the internet/day, the current study revealed that; more than half of the studied nursing students had two hours available to connect to the internet per day and more than three fifths of them found difficulty connecting to the internet. This study findings were incongruent with **Kısacık et al. (2023),** who conducted a study entitled "How attitudes towards e-learning affected the academic achievement during the covid-19 pandemic", in turkey, (n=130) and found that; 90.0% of the students hadn't difficulties in internet connection and connect to internet 3 hours daily. Also, this finding contradicted with **Arumugam et al. (2020),** who studied "The effects of smartphone usage on university students", in Malaysia, (N=106) and found that; 52.8% of the students had 3 hours available to connect to the internet daily. This might be due to the limited availability of reliable internet infrastructure or high costs associated with internet access in certain areas, which could restrict students' ability to connect for longer durations. Additionally, challenges such as inadequate bandwidth, network congestion, or lack of access to stable Wi-Fi in dormitories or study spaces might contribute to the difficulty in maintaining consistent connectivity.

Regarding total knowledge level about artificial intelligence in health care, the current study clarified that; more than one quarter of studied nursing students had good knowledge about artificial intelligence in health care, two fifths of them had average knowledge while less than one third of them had poor knowledge about artificial intelligence in health care. This finding consented with **Khaled & Elborai (2024),** who reported that; 29.7% of the studied students had high knowledge about AI. Also, this study finding was in harmony with **Al-Qerem et al. (2023),** who conducted a study about "Exploring knowledge, attitudes, and practices towards artificial intelligence among health professions', students in Jordan, (n=483) and showed that; 40.0% of studied participants had moderate knowledge about artificial intelligence. Similarly, this study finding was in the same line with **Swed et al. (2022),** who studied "Knowledge, attitudes, and practices of artificial intelligence among doctors and medical students ", in Syria, (n=1494) and reported that; 43.6% of the participants had average knowledge about artificial intelligence. Furthermore, this finding was in the same line with **Yüzbaşıoğlu, (2021),** who studied "Attitudes and perceptions of dental students towards artificial intelligence", in Turkey, (n=1103) and showed that; 42.4% of the studied students had moderate knowledge of AI technologies.

On the opposite side, this finding differed from **Abd El-Monem et al. (2023),** who studied "Artificial intelligence technology and its relation to staff nurses' professional identity and problem-solving abilities", in Egypt, (n=295) and showed that; 66.1% of the studied sample had a high level of knowledge of artificial intelligence technology, while none of them had low level of knowledge of artificial intelligence technology. These

findings may be attributed to lack of sufficient training and awareness about the most shared challenges to fully leveraging artificial intelligence in practice among students. Additionally, the rapid advancements in artificial intelligence technology could create a gap between what is taught and the current applications, leaving students with outdated or incomplete knowledge. Furthermore, a lack of accessible resources or specialized training sessions on artificial intelligence for nursing students might contribute to the uneven distribution of knowledge level.

Regarding the source of information about artificial intelligence in health care, the current study illustrated that; more than two thirds of studied nursing students acquired their knowledge about artificial intelligence in health care from social media. This study finding was compatible with **Sheela, (2022),** who conducted study about "Attitude of nursing students towards artificial intelligence", in Egypt, (n=189), and showed that; 68.0% of nursing students acquired their knowledge about AI in healthcare from social media. In the same context, this study finding supported by **Al Omari et al. (2024),** who mentioned that; social media play a crucial role among 80.0% of participants which shaped nursing students' knowledge and attitudes toward artificial intelligence in healthcare. This may be attributed to the increasing accessibility and prevalence of social media as a primary source of information for students, which often provides quick and easily digestible content but may lack depth and reliability. The reliance on peers as a source of knowledge could stem from a lack of formal education or structured curriculum addressing artificial intelligence in healthcare within the nursing program.

As regards the studied nursing students' total attitude level about artificial intelligence in health care, the current study demonstrated that; less than two thirds of the studied nursing students had negative attitude regarding artificial intelligence in health care, while more than one third of them had positive attitude. These findings disagreed with **Alsenany et al. (2024),** who reported that; 64.0% of studied students had a positive attitude about artificial intelligence in health care, while 36.0% of them had negative attitude about artificial intelligence in health care. Also, these findings opposed to **Khaled & Elborai (2024),** who reported that; 82.6% of the students had positive attitude regarding artificial intelligence in health care, while 17.4% of them had negative attitude regarding artificial intelligence in health care. This may be stem from misconceptions or fears that artificial intelligence may replace human roles in healthcare, particularly in patient-centered fields like nursing. Furthermore, inadequate access to reliable and detailed information about the benefits and limitations of AI may contribute to skepticism. Cultural and institutional resistance to adopting AI technologies in some healthcare settings might further reinforce negative perceptions.

Regarding correlation between the studied nursing students' total knowledge and their total attitude level about artificial intelligence in health care the current study showed that; there was a positive statistically significant correlation between studied students' total knowledge and total attitude about artificial intelligence in health care p-value ≤ 0.05. This finding was congruent with **Khaled & Elborai (2024),** who found that; there is a very statistically significant positive association between nursing students' total knowledge and their attitude toward artificial intelligence.

Also, this study finding was congruent with **Alsenany et al. (2024),** who found that;

most nursing students who had adequate knowledge of artificial intelligence, had positive attitude toward integrating artificial intelligence in health care. Moreover, this finding was in accordance with **Rony et al. (2024);** who emphasized the strong positive correlations between knowledge and attitudes of studied students regarding artificial intelligence. This may be because of increased knowledge about artificial intelligence in healthcare equips nursing students with a clearer understanding of its applications, benefits, and challenges, which in turn fosters more positive attitudes. Also, knowledge is likely to reduce misconceptions and apprehensions about artificial intelligence affecting the attitude of students to appreciate its potential to enhance healthcare practices.

Conclusion

The study showed that approximately two fifths of studied nursing students had average knowledge about artificial intelligence in health care, while less than a third of them had poor knowledge about artificial intelligence in health care. However, more than one quarter of studied nursing students had good knowledge about artificial intelligence in health care. In addition, more than three fifths of studied nursing students had negative total attitude level regarding artificial intelligence in health care, while more than one third of them had positive total attitude level regarding artificial intelligence in health care. There was a positive correlation between studied students` total knowledge level and their total attitude level about artificial intelligence in health care.

Recommendations

- Health educational programs should be developed and implemented for nursing students to increase their perception regarding various applications of artificial intelligence in health care.
- Further research in large sample and other setting for generalization.
- Encouraging nursing students to attend healthcare innovation conferences regarding artificial intelligence.
- Encouraging nursing students to engage in artificial intelligence hackathons, research projects, and academic competitions.

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إدراك طلاب التمريض تجاه الذكاء الإصطناعي في الرعاية الصحية

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مع التقدم التكنولوجي الحالي ووجود زيادة ملحوظة في الأبحاث التي تركز على الذكاء الاصطناعي في مجال تعليم التمريض، فما زال هناك حاجة إلى المزيد من الجهود لزيادة إدراك الطلاب لتبني الذكاء الاصطناعي في الرعاية الصحية. لذلك هدفت الدراسة إلى تقييم إدراك طلاب التمريض تجاه الذكاء الإصطناعي في الرعاية الصحية. وتم إستخدان تصميم البحث الوصفي لإجراء هذه الدراسة. وقد أُجريت هذه الدراسة في كلية التمريض جامعة بنها بمدينة بنها بمصر على عينة عشوائية بسيطة من طلاب الفرقة الرابعة مرحلة البكالوريوس بكلية التمريض جامعة بنها في العام الجامعي ٢٠٢٣/٢٠٢٤،حيث شملت العينة الكلية عدد = ٣٠٠ طالب. وكشفت النتائج ان ٤٠,٠٪ من الطلاب لديهم معلومات متوسطة بالذكاء الاصطناعي في الرعاية الصحية بينما ٣١,٣٪ من طلاب التمريض الذين تمت دراستهم لديهم معلومات ضعيفة بالذكاء الاصطناعي في الرعاية الصحية وان ٢٨,٧٪ من طلاب التمريض لديهم معلومات جيدة بالذكاء الاصطناعي في الرعاية الصحية كما كان لدى ٦٤,٠٪ من طلاب التمريض إتجاه سلبي تجاه الذكاء الاصطناعي في الرعاية الصحية. وقد لخصت النتائج الي وجود علاقة إيجابية ذات دلالة إحصائية بين معلومات طلاب التمريض واتجاهاتهم تجاه الذكاء الاصطناعي في الرعاية الصحية. أوصت الدراسة بتصميم وتنفيذ برامج التثقيف الصحي لطلاب التمريض، بهدف تعزيز إدراكهم لتطبيقات الذكاء الاصطناعي المختلفة في مجال الرعاية الصحية.