

KNOWLEDGE AND PERCEPTION OF PHARMACY STUDENTS REGARDING USE OF AI TOOLS IN PHARMACY EDUCATION

Artificial Intelligence (AI) is progressively finding applications across various domains, and education is no exception.

As we stand on the precipice of a digital era, understanding how students engage with and perceive AI in their educational journey holds profound implications for the future of pharmacy education and their evolving role as healthcare professionals. This study delves into the realm of pharmacy education, focusing specifically on the knowledge and perception of pharmacy students regarding the utilization of AI tools in pharmacy education.

We kindly request your participation in this study by completing the form, which will take less than 7 minutes of your time. Your participation is crucial as we aim to uncover insights that can inform educational strategies, foster innovation in curriculum design, and ultimately prepare pharmacy students for the dynamic challenges they will face in their professional careers.

We would also appreciate it if you could share the link with your colleagues and encourage them to participate in the study as well. Please note that every information provided in this questionnaire will be treated with confidentiality.

**Thank you for taking time to participate
in this study**

* Indicates required question

1. Do you give consent to participate in this study? *

Mark only one oval.

☐ Yes

☐ No

Demographic data

This section will document your sociodemographic data

2. Gender *

Mark only one oval.

☐ Male

☐ Female

3. Age *

4. Level *

Mark only one oval.

- ☐ 200
- ☐ 300
- ☐ 400
- ☐ 500

5. Religion *

Mark only one oval.

- ☐ Christianity
- ☐ Islam
- ☐ Others

6. Ethnicity *

Mark only one oval.

- ☐ Yoruba
- ☐ Igbo
- ☐ Other: _____

7. Have you received any prior education or training on AI in pharmacy education? *

Mark only one oval.

- ☐ Yes
- ☐ No

PHARMACY STUDENTS' KNOWLEDGE OF AI TOOLS IN PHARMACY EDUCATION

The following questions seek to assess your knowledge of AI tools used in pharmacy education. Please tick the most appropriate answer.

8. Have you heard of AI tools in pharmacy education? *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

9. Have you ever used an AI tool as a student? *

Mark only one oval.

☐ Yes

☐ No Skip to question 11

☐ I don't know Skip to question 11

10. If yes, for what purpose did you use the AI tools (Check all that apply)?

Check all that apply.

- ☐ To study
- ☐ Getting information on drugs
- ☐ Carrying out assignments
- ☐ Writing research articles
- ☐ Personalized Learning Recommendations
- ☐ Virtual Labs or Simulations
- ☐ Collaborative Learning Platforms
- ☐ Intelligent Content Creation or Generation

PHARMACY STUDENTS' KNOWLEDGE OF AI TOOLS IN PHARMACY EDUCATION

11. Which AI tools have you used as a pharmacy student? (Select all that apply) *

Check all that apply.

- ☐ Grammarly®
- ☐ Notion®
- ☐ Quillbot®
- ☐ ChatGPT®
- ☐ Gradescope®
- ☐ Drawn AI®
- ☐ Pharmee®
- ☐ Siri®
- ☐ Robotic App®
- ☐ Honor Lock®
- ☐ Teacher mate®
- ☐ Admissions IVY ChatBot®
- ☐ Other: _____

12. Which of the following factors influenced your decision to use AI tools in education? (*Check all that apply*) *

Check all that apply.

- ☐ Improved Efficiency
- ☐ Personalized Learning Experience
- ☐ Accessibility to Learning Resources
- ☐ Time Management
- ☐ Enhanced Understanding of Concepts
- ☐ Collaboration with Peers
- ☐ Other: _____

13. AI tools work by using small amount of data already processed by a human *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

14. Integration of AI in pharmacy education is aimed primarily at replacing traditional teaching methods *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

15. AI tools can be employed to create personalised learning plans for pharmacy students based on their individual needs * and performance data

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

16. AI generated data on pharmacy related information are always accurate *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ I don't know

PHARMACY STUDENTS' PERCEPTION OF AI TOOLS IN PHARMACY EDUCATION

This section is to assess the perception of pharmacy students towards use of AI tools in pharmacy education.

17. Please indicate your level of agreement or disagreement with the following item statements. Strongly agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly disagree (SD).

Mark only one oval per row.

	SA	A	N	D	SD
AI tools use reduces engagement/concentration from students during lectures	☐	☐	☐	☐	☐
AI is the future of pharmacy education	☐	☐	☐	☐	☐
I believe AI tools contribute positively to my academic performance in pharmacy education.	☐	☐	☐	☐	☐
Use of AI tools in giving online lectures makes it easier to get distracted by things going on in the home.	☐	☐	☐	☐	☐
Using AI tools during class requires self discipline	☐	☐	☐	☐	☐
Students were more likely to engage in academic dishonesty when using AI tools in taking tests or examinations	☐	☐	☐	☐	☐
Classes were less structured when instructors use AI tools to deliver lectures	☐	☐	☐	☐	☐
AI tools can enhance the learning experience of students in pharmacy education	☐	☐	☐	☐	☐
AI tools use in learning can bring increased accessibility to educational resources	☐	☐	☐	☐	☐



AI tools use in
learning can bring
inefficiency in
coursework

☐☐☐☐☐

All pharmacy
students should
receive teaching in AI
during their study

☐☐☐☐☐

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