Challenges Faced by Undergraduate Nursing Students to use of ChatGPT in Classroom Settings in Karachi, Pakistan

Burhanullah
MSN Scholar, ZUFONAM
Email: burhanullah.22634@zu.edu.pk

Muhammad Asif
MSN Scholar, ZUFONAM, Lecturer, Iqra University
Email: asif.shah @iqra.edu.pk

Abdul Razzaqe
MSN Scholar, ZUFONAM
Email: abdul.22622@zu.edu.pk

Abstract
To explore the challenges faced by undergraduate nursing students in the use of ChatGPT in assignment preparation. This strategy should be applied by teachers in a classroom. To formulate a hypothesis for future research regarding the use of ChatGPT in nursing education services. The strategy of ChatGPT should be limited in classroom settings. Human intelligence should be preferred in the classroom setting to enhance critical thinking. ChatGPT is also a teaching and learning resource. Most of the students are familiar with ChatGPT, and they complete their assignments with the help of ChatGPT. There is the issue regarding a lack of critical thinking among undergraduate nursing students in solving problems. In this generation, most students use ChatGPT to make their assignments quickly, but due to this approach, students do not use their own minds to prepare the assignments. In a classroom setting, whenever the teacher asks questions to check the basic knowledge of students, they do not use their minds, but they are using Chat-GPT. Therefore, they use this approach, but unfortunately, ChatGPT is impacting on human intelligence. According to the authors of most reviewed articles in this paper, ChatGPT and AI strategies in BS-Nursing education is harmful to critical thinking. all institutes of BS-Nursing education should make criteria regarding the limitations of AI strategies in assignments and thesis. Students should be motivated for limited use of ChatGPT and excessive use of brainstorms strategy of human intelligence. Human intelligence is better than ChatGPT (Choi EPH et al., 2023). Research design of this study is qualitative exploratory descriptive study. Sample size was 3 focus groups of Third year undergraduate nursing students in classroom settings. Sampling technique is purposive sampling. Focus group interviews were conducted and each group consists of six students. Audio recorder was used to record the interviews. After the interviews data was translated and transcribed. Data was analyzed according to Braun, and Clark thematic analysis. Rigors of the qualitative study were maintained. A thematic analysis criterion of Braun's and Clark 2021-2022 was used to analyze the qualitative data. In conclusion the finding of this analysis would provide inside into how undergraduate nursing students are integrating ChatGPT into their learning. In conclusion the finding of

this analysis would provide inside into how undergraduate nursing students are integrating ChatGPT into their learning. Majority of students are satisfied and familiar with ChatGPT. And they use the ChatGPT to making take take-home assignments. Some students do not use the ChatGPT in classroom due to lack of access to wifi in the classroom.

Keywords: Undergraduate Nursing students, ChatGPT, Critical Thinking, Challenges, Classroom, Internet Excess, Learning,

Introduction

ChatGPT is a helpful resource to get ideas on a particular topic**.** ChatGPT is a powerful AI application to solves the problem instantly. Undergraduate nursing students are familiar with completing the assignments in a classroom setting. Systematic literature review regarding the effect of ChatGPT on BS-Nursing education in Universities to detect the effect of ChatGPT in nursing education services. A total of 15 articles were retrieved, of which two were research articles of cross cross-sectional and quasi-experimental studies, and 13 articles were discussion/ comprehensive review papers. The discussed article was published in the Journal of Nurse Education Today in Australia in 2023. Hence qualitative exploratory research study is limited in Pakistan. A scoping review article was published in the JMIR journal in China. According to the author, students in the nursing care field are more likely to be habituated of ChatGPT. This is harmful to the critical thinking of the student; therefore, the challenges faced by BSN students should be explored through a qualitative study (YOU Zhou et al., 2024). Cross cross-sectional descriptive study has been published in the Journal of Research in Medical Science Review. According to the author, BSN students are not ready to use ChatGPT in the classroom setting; therefore, they are not familiar with using ChatGPT in the classroom setting. Most students face challenges regarding the use of ChatGPT in the classroom setting(Abdullah et al.,2025). Thematic analysis is the most important part of analyzing the qualitative data. There are six major step of thematic analysis which included familiarization of data, initial coding, generating themes, validity and reliability of themes, defining and remaining themes and interpretation of themes (Braun and Clark. 2022).

ChatGPT is valuable app in nursing education in classroom domain. It helps to instant complete the assignments in classroom. ChatGPT enhances the critical thinking and clinical decision making. It facilitates to students to get broad ideas on a particular topic. It is also a teaching learning resource. AI applications are used in nursing as resources of teaching and learning. This application is best for problem solving in lesser time (N Salama et al., 2025). A thematic analysis criterion of Braun's and Clark 2021-2022 was used to analyze the qualitative data

Problem statement

ChatGPT is beneficial for nursing students, but undergraduate nursing students are facing challenges regarding the use of ChatGPT in a classroom setting. There are quantitative research studies on undergraduate nursing students on to use of ChatGPT in the classroom setting. there is required to conduct an exploratory qualitative study to deeper understand the challenges of undergraduate nursing students in using of ChatGPT in the classroom (N Salama et al.,2025). Hence,

there is a need to conduct an exploratory qualitative study to explore the challenges faced by undergraduate nursing students regarding the use of ChatGPT in a classroom setting to make the assignments and search the ideas for learning in small groups (N Salama et al., 2025).

Objective
To explore the challenges faced by undergraduate nursing Students toward use of ChatGPT in a classroom setting.

Research question
What are the challenges faced by undergraduate nursing students regarding use of ChatGPT in classroom settings?

Literature Review
ChatGPT usage in nursing education
There is a significant impact of ChatGPT in nursing education. Critical thinking has been reduced by ChatGPT in this new renovation. We should counsel students regarding the merits and demerits of ChatGPT in education. All students should use their own minds to solve the problems and prepare for the assignments(1). A review article was published in the Nursing Education in Practice journal in North America by NANDA in 2024. To detect the critical thinking impairment due to the Use of ChatGPT in nursing education services. In the study, it came under observation that students were using Chat-GPT to find out nursing diagnoses and nursing care plans that are not according to NANDA, therefore, there is a need to conduct of qualitative study to explore the challenges (2). A comprehensive literature review which is comprehensive was published in the journal Nursing Outlook in Europe by December 2023. A review regarding the impact on nursing education was conducted. Conclusion: nursing education should be declared regarding the limitations of artificial intelligence to prevent from alteration in human intelligence. Each student should be informed about the limited use of ChatGPT; hence, exploratory research should be conducted(3).

Surveys regarding chatGPT in BSN
Discussion article was published in journal of Nurse Education Today in Australia by 2023. There is bed impact of chatGPT in nursing education. Critical thinking has been lesser by chatGPT in this new renovation. We should have counseled to students regarding merit and demerits of chatGPT in education. All students should motivate for brainstorming to solve the problems and prepare the assignments. Hence exploratory study should be conducted in nursing education in Pakistan to explore the challenges. (4). Review paper was published in journal of Nurse Education Today by 2023 in Australia. Finding of this article was benefits of chatGPT in nursing and midwifery education. ChatGPT is beneficial for students to prompt solution of assignments. However we need to conduct exploratory qualitative study among undergraduate in local context.(5). A scoping review was published in Nurse Education Today journal in Australia by 2024. 100 studies were reviewed in this article. Issue was noted regarding misuse of chatGPT in research, thesis and dissertations. It's observed wrong habit among students that they use chatGPT in research. Due to use of chatGPT students were observed to plagiarize the data. Similarity index is a proof of use of

chatGPT. Students are more anxious on increase similarities in similarity index due to use of chatGPT. It should be limited in education to prevent alteration of critical thinking. Hence chat-Gpt should be limited in classroom setting to prevent from harm of human intelligence.(6).

Challenges and barriers regarding Chatgpt among BSN students
Discussion article was published in Nurse Education Today journal in Australia by 2023. Conclusion of article was that in classroom a teacher should have discussed with students regarding bed impact of chatGPT in problem solving. Teachers should have observed to students in problem based learning strategy. Students should have submitted citation of references of assignments. It was observe the critical thinking of students has been altered due to misuse of chatGPT and other AI tools to complete the assignments(7). Study published in MAEEN journal of Medical Science. In future ChatGPT will be beneficial for improving research publications. Every nursing student should be trained in use of ChatGPT. Each college of nursing should have conduct workshop regarding training of ChatGPT for students. In this new renovation environmental mastery is important for students. AI tools are mandatory for teaching and learning in education in this competitive period. Furthermore there is limited studies in nursing education regarding use of chat Gpt(8). Research published in Asian journal of nursing education and research. According to the author of this article chatGPT usage is beneficial for nursing students for solution of different assignments. ChatGPT is beneficial for critical thinking. It is student centered approach still exploratory studies are limited on the database(9). Discussion paper has been published by 2024 in journal" Teaching and Learning in Nursing" according to author chatGPT is used in teaching and learning for learning resource by students in classroom. It is also used in teaching by teachers as a resource of teaching. In future teaching and learning would be depended on chatGPT. ChatGPT usages are harmful for students in critical thinking. Moreover challenges regarding chatGPT in nursing should be investigated. (10). Editorial review paper was published in Nursing Studies by 2023. It is regarding impact of chat-GPT in nursing education it is used for different languages. It is used by students for quickly making assignment. It is also used by teachers for resource of teaching in classroom. It is harmful for critical thinking intellectual capabilities in human beings. It should be limited in classroom in education.(11). According to author chatGPT usage has been increased in nursing education due to new renovation of environmental mastery but chatGPT is harmful for critical thinking of every individual. Human intelligence should be prioritized first of all in BS-nursing education because nurses solve the multiple problems of patients at bedside(12). The discussion paper has been published in Nurse Education in Practice by 2024. Students solve their assignment through chat-GPT whereas chat-GPT is harmful for critical thinking. According to this review paper impact of chatGPT in education of nursing students is very bed. Teacher should be instructed in the classroom to students of nursing for limited use of AI. Students are failure in graded assignments due to similarity index report of AI because turn tin can detect the AI similarities too. So we should be teach to students regarding avoid from excessive use of AI in research and thesis(13). A quasi experiment research study published in JSTOR journal by 2020 regarding effectiveness of AI strategies in teaching and learning. Two groups were selected

in this research to check outcome of study. One was experiment group and second group was non-experiment group. Results of experiment group regarding effectiveness of teaching and learning through use of Artificial intelligence strategies in classroom is better than non-experimental group. Moreover investigations regarding challenges among nursing students should be explored through descriptive qualitative study.(14). A cross sectional descriptive study has been published in Sage Journals by 2024. Study conducted on nurse's sample size was 288 Turkish nurses. Questionnaire was distributed for data collection regarding knowledge, attitude and practice of nurses regarding use of ChatGPT according to author the nurses were interested to use ChatGPT to search solutions of patient's multiple problems quickly. Nurses were having good attitude and knowledge regarding usage of chat-GPT in hospital settings. There is need of investigation of challenges among nursing students regarding chat Gpt usage in classroom.(15).

Literature Gap
There are limited qualitative research studies regarding chatgpt in nursing education in Pakistan. There is no any qualitative exploratory study among undergraduate nursing students toward use of chatgpt in classroom setting in Pakistan. As per previous studies undergraduate nursing students are facing difficulties toward use of chatGPT. Therefore there is needing of qualitative exploratory research study to deeper understand the views of nursing students regarding chatGPT.

Research methodology
Research design of this study is qualitative exploratory descriptive study. Sample size was 3 focus groups of Third year undergraduate nursing students in classroom settings. Sampling technique is purposive sampling. Focus group interviews were conducted and each group consists of six students. Audio recorder was used to record the interviews. After the interviews data was translated and transcribed. Data was analyzed according to Braun, and Clark thematic analysis. Rigors of the qualitative study were maintained. A thematic analysis criterion of Braun's and Clark 2021-2022 was used to analyze the qualitative data.

Target population
Undergraduate nursing students in a University were selected from the classroom domain or theory classes who use chatGPT in classroom. Design of Qualitative exploratory, study duration was three months. Sample size was consisting of three focus group (each group consists of six students of BSN 4th years,). Sampling technique was purposive sampling. The Inclusion criteria was included fourth year undergraduate nursing students are having experience of chatGPT. Exclusion criteria was included Students are not allowed who are not enrolled in BSN program. Students are not having experience of chatGPT. Students are on leaves. Focus group interviews were conducted. Semi structured interview guide was used to ask the questions. Guidelines of thematic analysis of Braun's and Clark were used to analyzing the data.

Inclusion criteria Students of BSN fourth year, Students of classroom domain.

Students are available. Students are willing to participate.

Exclusion criteria Students of skill lab and clinical domain. Students are not available. Students are not willing to participate.

Ethical consideration
Anonymity of participants and confidentiality was maintained. Consent was taken from participants.

Results
Data preparation: after the data collection data was transcribed and summarized. Them and code were selected according to Brauns and Clark thematic analysis. Data was written accordingly.

Coding the data

Theme	Description	Supporting codes
1-Enhanced Learning Efficiency	ChatGPT helps students to save time and summarize complex topics, allowing efficient study practice.	Time-saving Brainstorming support, Exam aid
2-Accuracy and Reliability Concerns	Students are unsure about ChatGPT's responses, especially when precisions is important in nursing	Accuracy concerns
3-Ethical and Professional Implication	Concerns about plagiarism, originality, and over dependence on ChatGPT.	Ethical Concerns, Reduced critical thinking
4-Accessiility and Environment Barriers	Limited internet access and teacher restrictions hinder ChatGPT use.	Limited access, Institutional restrictions
5-Roll of Educators and Need for guidance	Students express a preference for blended learning and teacher involvement	Preference for human guidance
6-Use of Supplementary Tool	Students use ChatGPT as a secondary aid rather than primary source of learning.	Brainstorming support, Exam aid.
7-Impact of Critical Thinking	Over use of ChatGPT may hinder students developments of problem- solving and independent thought	Reduced Critical Thinking

Initial coding: begin my reading through the responses and codes were assigned to meaningful experts. Easy access to enhance understanding,

information, time saving, and accuracy concerns etc.

Organizing codes: group similar codes into broader categories for example codes such as time saving and quick information retrieval could be group under a theme like efficiency.

Theme identification: according to refraining and refining codes broader theme can be identified. Entire themes of the study gives answer the research question.

Themes for use of chatGPT among undergraduate nursing students
Enhanced learning efficiency: Many nursing students may mention how chatGPT provides quick answers to questions or helps summarize complex topics allowing them to study more effective and safe time.

Perceived accuracy and reliability: Some students might highlight the concerns about the accuracy or Reliability of answer chatGPT. Especially in the context of nursing knowledge where precision is crucial this theme might focus how students verify the information they receive.

Supplemental learning tool: chatGPT could be seen as a supplementary tool that helps to clarify the concepts. ChatGPT can be used for teaching learning resources in this period.

Ethical and professional concerns: Concerns regarding plagiarism is necessary to understand or how using chatGPT might conflict with profession of nursing education, language understands and responses that are overly simplistic.

Confidence boost in assignment and exam: nursing students are familiar with chatGPT to making quizzes, assignment, Stories etc for exam. According to students chatGPT guides them to practice problem

Opportunities for clinical education: For using chatGPT a theme could be emerge for clinical learning such as how students might see its potential in simulating patients scenarios providing medical references or assisting with decision making in classroom environment

Limitations and challenges: Students share their frustrations with chatGPT such as limitations in answering complex clinical scenarios. According to students some teachers in the classroom do not like chatGPT therefore they do not allow the use of chatGPT in classroom settings.

Analysis and interpretation: the final step is interpretations of the identified themes and analyzing what they reveal about the nursing students perception of chatGPT for example
Positive perceptions: If many student's highlights themes such as enhance learning efficiency and confidence in assignments. It would suggest that chatGPT is viewed positively as a supplementary tool for academic access.

Barriers and concerns: The themes such as ethical dilemmas and concerns could indicate that students are oriented about relying too heavily on chatGPT recognizing both its utility and limitations.

Integration for curriculum: Curricula of nursing students should be having AI apps for teaching learning resources to prevent the wasting the time and clearing the concepts.

Development of AI tool for nursing education: If students are familiar to use of chatGPT so students must be having internet access.

Training for responsible use: Educating the students about AI apps like chatGPT. Identify the barriers regarding chatGPT. Awareness programs should be arranged for students regarding merits and demerits of chatGPT.

Discussion

There is bed impact of chatGPT in nursing education. Critical thinking has been reduced by ChatGPT in this new renovation. We should counsel students regarding merit and demerits of chatGPT in education. All students should use their own mind to solve the problems and preparation of the assignments(1). Review article was published in nursing education in practice journal in North America NANDA by 2024. To detect the critical thinking impairment due to Use of ChatGPT in nursing education services. In study it came under observation that students were using chat-GPT to finding out nursing diagnosis and nursing care plan which are not according to NANDA, therefore there is need of conduction of qualitative study to explore the challenges (2). A literature review which is comprehensive was published in journal Nursing Outlook in Europe by Dec, 2023. Review regarding chatGPT impact in nursing education was conducted. Conclusion nursing education should be declared regarding limitation of artificial intelligence to prevent from alteration in human intelligence. Each student should be informed about limited use of chatGPT hence exploratory research should be conducted(3).

Research design of this study is qualitative exploratory descriptive study. Sample size was 3 focus groups of Third year undergraduate nursing students in classroom settings. Sampling technique is purposive sampling. Focus group interviews were conducted and each group consists of six students. Audio recorder was used to record the interviews. After the interviews data was translated and transcribed. Data was analyzed according to Braun, and Clark thematic analysis. Rigors of the qualitative study were maintained. Begin my reading through the responses and codes were assigned to meaningful experts. Easy access to enhance understanding, information, time saving and accuracy concerns etc. Group similar codes into broader categories for example codes such as time saving and quick information retrieval could be group under a theme like efficiency. According to refraining and refining codes broader theme can be identified. Entire themes of the study gives answer the research question. Research was conducted to know about challenges faced by undergraduate nursing students regarding chatGPT some students do not use the chatGPT in classroom setting and some students are familiar with chatGPT. Some students use chatGPT to search the knowledge about class lectures. Some students use the

chatGPT to complete the written assignment in classroom domain. Thematic analysis is the most important part of analyze the qualitative data. The data was transcribed according to guidelines (Brauns and Clark. 2022). There are six major step of thematic analysis which included familiarization of data, initial coding, generating themes, validity and reliability of themes, defining and remaining themes and interpretation of themes (Braun and Clark. 2022). Moreover Rigors and trustworthiness of this study was maintained properly which included: credibility, transferability, conformability and dependability.

Acknowledgment: acknowledged to all researchers which are used to write the literature review in this study and these researches are more beneficial for future researches to understand the knowledge of research regarding chatGPT.
Suggestions: ChatGPT can be use as a teaching learning strategy in classroom but students should be having internet access to use of chatGPT. ChatGPT can be limited in classroom setting to prevent from alteration in human intelligence. Acknowledged to all research and review articles regarding researches on
Conclusion: in conclusion the finding of this analysis would provide inside into how undergraduate nursing students are integrating chatGPT into their learning. Most of the undergraduate students are limited to use of chatGPT in classroom due to limited access of wifi in classroom. Some students are familiar of chatGPT to making assignments in the classroom.

References
Yalcinkaya T, Yucel SC. Bibliometric and content analysis of ChatGPT research in nursing education.

n: The rabbit hole in nursing education. Nurse Education in Practice. 2024;77:103956.

Gosak L, Pruinelli L, Topaz M, Štiglic G. The ChatGPT effect and transforming nursing education with generative AI: discussion paper. Nurse Education in Practice. 2024;75:103888.

Liu J, Liu F, Fang J, Liu S. The application of Chat Generative Pre-trained Transformer in nursing education. Nursing Outlook. 2023;71(6):102064.

Choi EPH, Lee JJ, Ho M-H, Kwok JYY, Lok KYW. Chatting or cheating? The impacts of ChatGPT and other artificial intelligence language models on nurse education. Nurse Education Today. 2023.

Irwin P, Jones D, Fealy S. What is ChatGPT and what do we do with it? Implications of the age of AI for nursing and midwifery practice and education: An editorial. Nurse education today. 2023;127:105835.

Shorey S, Mattar CN, Pereira TL-B, Choolani M. A scoping review of ChatGPT's role in healthcare education and research. Nurse Education Today. 2024:106121.

Tam W, Huynh T, Tang A, Luong S, Khatri Y, Zhou W. Nursing education in the age of artificial intelligence powered Chatbots (AI-Chatbots): are we ready yet? Nurse education today. 2023; 129:105917.

Alkhaqani AL. Potential benefits and challenges of ChatGPT in future nursing education. Maaen Journal for Medical Sciences. 2023;2(2):2.

Lata K, Kudi SR. Role of Chat GPT in Nursing: Brief Communication. Asian Journal of Nursing Education and Research. 2024;14(1):70-2.

Athilingam P, He H-G. ChatGPT in nursing education: opportunities and challenges. Teaching and Learning in Nursing. 2023.

Allen C, Woodnutt S. Guest editorial: Can ChatGPT pass a nursing exam. Internationl Journal of Nursing Studies. 2023;145:104522.

Castonguay A, Farthing P, Davies S, Vogelsang L, Kleib M, Risling T, et al. Revolutionizing nursing education through AI integration: A reflection on the disruptive impact of ChatGPT. Nurse education today. 2023;129:105916.

Gunawan J. Exploring the future of nursing: Insights from the ChatGPT model. Belitung Nursing Journal. 2023;9(1):1.

Chang C-Y, Yang C-L, Jen H-J, Ogata H, Hwang G-H. Facilitating nursing and health education by incorporating ChatGPT into learning designs. Educational Technology & Society. 2024;27(1):215-30.

Tuncer GZ, Tuncer M. Investigation of nurses' general attitudes toward artificial intelligence and their perceptions of ChatGPT usage and influencing factors. Digital Health. 2024;10:20552076241277025.

Salama N, Bsharat R, Alwawi A, Khlaif ZN. Knowledge, attitudes, and practices toward AI technology (ChatGPT) among nursing students at Palestinian universities. BMC nursing. 2025 Mar 11;24(1):269.

Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, *18*(3), 328–352. https://doi.org/10.1080/14780887.2020.1769238