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Research Article

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Professional Attitude among Nursing Students in AL-Hasahisa College of Medical Sciences and Technology, Sudan: A Cross-Sectional study



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Abstract

Background: The professional attitude of nurses begins to develop as soon as they start their nursing education and is usually completed by the end of their studies. **Objective:** To assess the Professional Attitudes among Nursing Students in AL-Hasahisa College of Medical Sciences and Technology. **Methods:** A descriptive cross sectional study design consisted 140 nursing students from the second, third and fourth academic years. Data were collected using the Instrument of Professional Attitude for Student Nurses (IPASN) scale. Data were analyzed using SPSS. **Results:** The total IPASN score among nursing students was found (54.56±8.44). Based on the predefined scoring classification of the IPASN scale, this score falls within the low range (28–65), indicating a low level of professional attitudes among the study participants. Overall, this study showed no statistically significant differences were found in total IPASN mean score regarding to the age, sex, academic years and marital status, Statistical significance was ($p > 0.05$). **Conclusion:** The study concluded that the nursing students demonstrated a low level of professional attitudes, as reflected by the total IPASN score.

Key words: Nursing, Students, Professional, Attitudes, IPASN

INTRODUCTION

Professional attitudes are a central component of nursing professionalism, encompassing internalized values, identity, ethical commitment, and behaviors that sustain safe, patient-centred care and

public trust in the profession. Strong professional attitudes in nurses have been linked to higher quality of care, patient safety, and better teamwork, making their early formation during undergraduate education a core goal of modern nursing curricula (Green, 2020; Sümen et al., 2022). Globally, nursing education is expected not only to develop clinical competence but also to cultivate professional identity, values, and attitudes that support lifelong commitment to the profession. Studies from diverse settings show that professional attitudes and values begin to form as students enter nursing programmes and continue to develop across the years of study, influenced by learning experiences, role models, and clinical exposure (Elbashir, 2024; Salih et al., 2025). Recent evidence demonstrates that stronger professional attitudes among nursing students are associated with more positive caring behaviors and safer, more humanistic practice intentions. A cross-sectional study in Turkey found a positive statistical relationship between professional attitude scores and caring behaviors, suggesting that students who more strongly embrace professional norms are more likely to engage in attentive, respectful patient care (Sümen et al., 2022). Professional attitudes are shaped by multiple determinants, including professional identity, academic self-efficacy, and perceptions of preparedness for practice. Higher vocational nursing students in China showed that academic self-efficacy and professional identity were significant positive predictors of professional attitude, particularly professional cognition, will, and values (Xu et al., 2021). Among senior nursing students, professional identity profiles were closely linked to perceived professional preparedness for future roles, underlining the importance of identity formation for readiness to practice (Dharmarajlu & D AM, 2025).

Across countries, research also highlights how the nursing education influences the professional values development over time. Comparative studies show that students generally rate caring, ethics and justice domains highly, while activism, professionalism, and professional mastery often receive lower emphasis, indicating a gap between technical/procedural learning and broader professional engagement (Porchangizi et al., 2019). Gender and educational context further shape these attitudes; for example, male nursing students may experience lower professional identity and stronger role strain, partly due to stereotypes and curricular factors (Chen et al., 2020). Across the Middle East and North Africa region, including Sudan, nursing students train in environments characterized by high academic and clinical stress, resource constraints, and evolving health system demands. An overview of systematic reviews covering MENA countries reported very high levels of perceived stress among nursing students, with common stressors including clinical workload, patient care responsibilities, examinations, and limited support, all of which may erode professional attitudes and commitment if not adequately addressed (Chaabane et al., 2021). In Sudan specifically, a multi-institutional study reported that most undergraduate nursing students experienced moderate stress, with environmental pressures identified as the leading cause, and recommended structured counselling and orientation programmes to mitigate these challenges (Fadlalmola et al., 2023).

Contextual factors in Sudan further complicate the formation of professional attitudes. The COVID-19 pandemic markedly disrupted clinical practicum in government nursing colleges in Khartoum, reducing students' clinical exposure and increasing anxiety among educators and learners (Khalid et al., 2025). More recently, armed conflict has severely disrupted medical and paramedical education, causing displacement, psychological distress, and major interruptions in teaching and clinical training, raising concerns about educational quality and the future nursing workforce (Fernández-Feito et al., 2019). These disruptions may weaken students' sense of professional preparedness, identity, and commitment. Assessing professional attitudes among nursing students helps evaluate their readiness for ethical, patient-centered care. Studies show that positive professional attitudes correlate with reduced medical errors and improved adherence to the International Council of Nurses (ICN) Code of Ethics (International Council of Nurses [ICN], 2021; Numminen et al., 2017). In African contexts, nursing students' attitudes toward professionalism are influenced by clinical exposure, curriculum quality, and faculty mentorship (Muliira et al., 2016). Emerging

Sudanese evidence also points to specific professional behaviour challenges among nursing students. A study at the University of Khartoum found that students frequently committed medication errors and rarely reported them, largely due to fear of punishment and negative reactions from supervisors, revealing gaps in patient-safety culture and professional responsibility during training (Mohammed et al., 2025). High levels of intention to migrate among Sudanese nursing graduates and postgraduates—nearly half reporting willingness to work abroad if given the chance—raise additional concerns about long-term professional commitment to the national health system (Mohamed et al., 2025).

Despite international and regional recognition that professional values and attitudes are critical for safe, ethical, and sustainable nursing practice, most studies in Sudan have focused on discrete issues such as stress, perceptions of teaching methods, knowledge in specific clinical domains, medication safety, or migration intentions (Bleda et al., 2020). There is a paucity of systematic assessments of overall professional attitudes among Sudanese nursing students, and little is known about how local educational conditions, stressors, and health-system instability influence their professional orientation. Given the centrality of professional attitudes to patient safety, ethical practice, and workforce retention, and in view of the distinctive pressures on nursing education in Sudan, there is a clear need to assess the current status of professional attitudes among nursing students in this context. Such evidence can help educators and policymakers identify strengths and vulnerabilities in students' professional formation and design targeted curricular and institutional interventions to support a resilient, ethically grounded nursing workforce. This study aimed to assess professional attitudes among nursing students in Al-Hasahisa College of Medical Sciences and Technology.

METHODOLOGY

Study Design

This study was a descriptive cross-sectional study, conducted during August 2025 at Nursing department in Hasahisa College of Medical Sciences and Technology, in Hasahisa city, Sudan. 140 nursing students were included using census approach targeting all available students from the second, third and fourth academic years, who resumed their attendance during the first month following the college's official post-war reopening at its premises. First-year students were excluded from the study as they are primarily engaged in general and foundational courses, and have not yet progressed to in-depth specialized nursing subjects.

Data collection were conducted using a self-administered questionnaire consisting of two main parts. The first part include the demographic information (Gender, age, academic level and marital status) The second part comprised the Instrument of Professional Attitude for Student Nurses (IPASN) scale developed by Hisar et al. the IPASN scale consists of 28 items. This instrument is designed to assess various aspects of professional attitudes among nursing students, such as their desire for further education (Master's/PhD), contribute in scientific research, professional association membership, adherence to ethical standards, application of nursing models and theories, and desire for professional development. The IPASN questionnaire (19) is a validated scale, and its reliability and validity have been confirmed in multiple previous studies across different cultural contexts. For instance, previous studies have reported overall Cronbach's Alpha values for the questionnaire ranging from 0.869 to 0.91, indicating high internal consistency. The content validity of the questionnaire was ensured through review by a panel of experts in the nursing field to confirm the suitability and comprehensiveness of the items for the Sudanese context.

Data were analyzed using SPSS version 26, frequencies, percentages means and standard deviations were used, the inferential statistics (Mann–Whitney U and Kruskal–Wallis) were used for analysis ($p < 0.05$).

Ethical Considerations

Permission was taken from the management of Al- Hasahisa College of Medical Sciences and Technology for conduct this research. Written consent was obtained from each participating student

after ensuring their full understanding of the research objectives, and ensure confidentiality, And all data were handled with strict privacy.

Results

Table 1: Sociodemographic data of nursing students (N = 140)

Variable	Category	Frequency	Percent(%)
Sex	Female	115	82.1
	Male	25	17.9
Age	≥20 years	7	5.0
	20 - 25 years	121	86.4
	≥26 years	12	8.6
Academic year	2nd year	13	9.3
	3rd year	79	56.4
	4th year	48	34.3
Marital status	Single	88	62.9
	Married	42	30.0
	Divorced	10	7.1

This table shows majority of students were female (n = 115, 82.1%), while males constituting 17.9% (n = 25). Most participants their age between 20-25 years (n = 121, 86.4%), Regarding academic year, over half were in the third-year students (n = 79, 56.4%), followed by fourth-year (n= 48, 34.3%) and second-year students (n = 13, 9.3%). The majority of students were single (n= 88, 62.9%), followed by married (n = 42, 30.0%) and Divorced students (n=10, 7.1%).

Table 2: Distribution of IPASN subscale scores (N = 140)

IPAN	Number of items	X±SD
Contributing to the enhancement of scientific information	6	1.81±0.61
Autonomy	3	2.30±0.77
Cooperation	5	2.47±0.71
Competence and continuing education	3	1.70±0.66
Participating in professional organizations and professional development	3	2.10±0.71
Working in committees	2	1.73±0.77
Community service	3	1.59±0.64
Ethical codes and theory	3	1.60±0.56
Total	28	54.56±8.44

Table 2. This table shows the distribution of the professional attitude scores, Across the 8 subscales of IPASN, the highest score was observed for Cooperation (2.47±0.71), whereas the lowest mean score was for community service (1.59±0.64). The mean total IPASN score among nursing students was (54.56±8.44).

Table 3. Associations between total IPASN Score and demographic characteristics (N = 140)

Demographic characteristics	Test	Value	df	p-value
Sex	U	0.74	-	0.460
Age group	H	8.79	2	0.320
Academic Year	H	3.35	2	0.187
Marital Status	H	2.17	2	0.863

Table 3. There was no statistically significant differences in the total IPASN score according to sex ($p = 0.460$). Similarly no statistically significant differences were observed according to age group ($p = 0.320$). The results also revealed no statistically significant differences between academic year and total IPASN score, ($p = 0.187$). Overall, no statistically significant differences in professional attitude were found according to the sociodemographic characteristics of nursing students ($p > 0.05$).

DISCUSSION

The educational experiences play a crucial role in promoting constructive professional attitudes, contributing to the development of favorable perceptions toward the nursing profession, It is widely recognized that appropriate professional attitude of nursing students should developed during their educational period. (Dikmen et al., 2016; Sabancıoğulları et al., 2011). As in all fields of education, affective variables such as beliefs, emotions, feelings, interests, expectations, and motivation play a crucial role in shaping these attitudes. (Çelik et al., 2016). In nursing education, these factors are particularly important, as they influence students' professional development and readiness for clinical practice (Sabancıoğulları et al., 2011). This study conducted to assess professional attitudes of nursing students in Hasahisa College of Medical Sciences and Technology, as measured by the IPASN scale, and to explored their relationships with key sociodemographic variables. The demographic characteristics of study sample showed that the majority of participants were female, which is consistent with the global trend in nursing education. The largest age group was between 20 and 25 years, more than half of them were third-year students. And the majority was single. These basic demographic characteristics of the sample are consistent with the nature of a study in an academic college.

The present study revealed that across the 8 subscales of IPASN, the scores were high in Cooperation (2.47 ± 0.71) and Autonomy (2.30 ± 0.77). The low mean scores were for Community Service (1.59 ± 0.64) and Ethical codes and theory (1.60 ± 0.56). Nursing students demonstrated a low level of professional attitudes, as reflected by the total IPASN score (54.56 ± 8.44), which falls within the low range of the scale when considering the maximum possible score of 140. This finding align with those of Çelik et al. (2016) who reported a total IPASN score of (65.03 ± 15.90) among participants. This results inconsistent with study conducted by Dikmen et al., (2016) reported that the professional attitude levels of students were above the medium-level (113.43 ± 15.39). In contrast a study by Al Shammari et al. (2017) reported (113.6 ± 15.0). The discrepancy between the current study and previous research may be attributed to differences in educational settings and levels of clinical training. Or the curriculum focuses more on clinical training than on deep-rooted professional values.

This study revealed no statistical significant differences in total mean IPASN score across sex, age, academic year, and marital status aligns with some recent reports in nursing education literature. The current results found that no statistically significant relationship between age and total IPASN score. These results are consistent with Al Shammari et al. indicated that no relationship was found between age and professional values. However Kubsch et al. (2008) found appositve significant relationship with the scores of professional values. The results also revealed no statistically signifi-

cant differences between academic years and total IPASN score, This results is Similarly to study done by Kayrak and Yilmaz (2020) they reported that there were no association between nursing students' academic standing and professional orientation. While some studies have noted that age and academic progression modestly enhance the professional attitudes (Alreshidi et al., 2021). This finding contrasts with previous research and may be attributed to differences in educational environments, curriculum design and variability in clinical exposure. Cultural and institutional factors, educational policies within the institution or standardized clinical exposure, could contribute to the homogenization of attitudes. This effect may be even more pronounced in settings where nursing professionalization is systematically emphasized across all student groups, independent of individual attributes.

CONCLUSION

The study concluded that the nursing students demonstrated a low level of professional attitudes, as reflected by the total IPASN score, and there were no statistically significant differences in professional attitude were found according to the sociodemographic characteristics of nursing students ($p > 0.05$), These results reflect a lack of awareness and importance of professional development and adherence to the standards of the modern nursing profession. To enhance professional attitude, the study recommended that, nursing education should implement targeted, intensive workshops designed to help nursing students to develop professionalism, and implement longitudinal assessment tools to monitor their development throughout years of study.

ETHICS

There is no any ethical issues that may arise after the publication of this manuscript.

Duality of interest

The authors declare that there is no conflict of interest associated with this manuscript..

Author contributions:

Susan Ali Zroog conceptualized the study, designed the research, collected and analyzed the data, interpreted the findings, and drafted the original manuscript. Abdelhakam Ali contributed to the study methodology, data interpretation, and critically revised the manuscript for important intellectual content. Fatima Elhag Ahmed participated in data collection, interpretation of the findings, and manuscript revision. Sabah Hasan Lamloom supervised the research, provided academic guidance throughout the study, critically reviewed the manuscript, and approved the final version for publication. All authors read and approved the final manuscript and agreed to be accountable for all aspects of the work.

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Author’s number	Specify contribution in more detail (no more than one sentence)
1	Conceptualized the study, designed the research, collected and analyzed the data, interpreted the findings, and drafted the original manuscript.
2	Contributed to the study methodology, data interpretation, and critically revised the manuscript for important intellectual content.
3	Participated in data collection, interpretation of the findings, and manuscript revision.
4	Supervised the research, provided academic guidance throughout the study, critically reviewed the manuscript, and approved the final version for publication

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

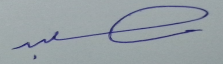
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- ✓ Approved the version to be published;

- ✓ Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Otherwise, contributors should be listed in an “Acknowledgements” section for those who do not meet the above authorship criteria.

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