Vision of Nursing Professionals regarding Futuristic Nursing

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Abstract

Quality nursing care improves health outcomes, but it requires good vision. Working in a wide array of settings and practice at a range of professional levels, nurses are often the first line of contact with people of all backgrounds, seeking care representing the largest share of the healthcare professionals. Nurses have a critical role to play in achieving the goal of health equity, but they need robust education, supportive work environments, and autonomy. The present study aimed to explore the vision of nursing professionals regarding futuristic Nursing and analyse the association between the vision of nursing professionals about futuristic nursing and demographic variables. An exploratory descriptive design was adopted. A purposive sampling technique was used to include 329 nursing professionals and their consent was obtained. Opinionnaire was prepared in the Google form with 20 statements with a scale of strong agreement to strong disagreement, and responses were obtained from the subjects. Demographic variables, opinionnaire scores, correlation of opinions and the association between the demographic variables and opinions were computed using mean, SD and percentages, Pearson's correlation coefficient, and Chi-square test respectively, using SPSS 24.0. A p-value of 0.05 was considered as significant. The association between opinions and demographic variables was statistically not significant. There was a positive correlation between the set of opinions with strong agreement to strong disagreement. The mean of the opinion scores was 69.18 ± 17.998. There was a statistically significant association ($p<0.05$) between age, education, years of experience and all the selected components of futuristic nursing, except advocating for policy change and enhancing visibility, the image of nursing, being authentic and supportive. There was a statistically significant association ($p<0.05$) between the current area of practice and working across disciplines, addressing social needs, and advocating for policy change. There was a statistically significant association ($p<0.05$) between attending any workshop/ conference and addressing social needs. Nursing professionals require sustained reinforcement, support and capacity building to enlighten their vision on futuristic nursing.

Key words: Vision of nursing, Futuristic nursing

Nurses work in a wide array of settings and practice at a range of professional levels and constitute the largest of the healthcare professionals serving as the first line of contact with people of all backgrounds. Nurses have a pivotal role in achieving the goal of health equity, but they need robust education, supportive work environments, and autonomy (Flaubert et al, 2012). Nurses need to be educated to care for a population that is both ageing, and becoming increasingly diverse, to engage in new professional roles, to adapt to new technologies, to function in a changing policy environment, and to lead and collaborate with professionals from other sectors and professions (Flaubert et al, 2012).

Nurses' roles, responsibilities, and education are changing significantly to meet the increased demand for care. Advancement of competencies in existing informatics technologies, such as clinical decision support systems, electronic health records, and mobile technologies, is essential. Possessing a critical mass of nursing leaders who understand the intended and unintended consequences as well as opportunities of these kinds of technologies is vital to ensuring the quality and safety of nursing. Providing opportunities to nurses of all specialities to contribute to the development and implementation of digital health policies, locally and nationally, could increase the future use of digital technologies in nursing. Nurses need ongoing support from the systems that educate, train, employ, and enable nurses to advance health equity. Policymakers and system leaders should support, strengthen, and transform the largest segment of the health workforce so that nurses can help chart our country's course to better health and well-being for all.

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Across the country, 31 nursing leaders from different sectors of nursing participated in a national deliberation organised by Dr M Prakasamma. Most of them stated that the degree of involvement of nursing staff in decision-making and policy development is very low considering their large number and critical roles. Leaders and advocates within a professional group are essential for representation. Nurses are hesitant to take up leadership roles as they feel they will violate professional ethics. Gender stereotypes also pull potential leaders from taking advocacy and leading a movement for improvement. Participants expressed concern about the lack of leadership in nursing (Deepak, 2023).

Organisations can create a work environment that values autonomy and decision-making, fostering commitment among nurses (Gavya & Subashini, 2024). The nursing profession stands at the precipice of a transformative era, poised to experience significant changes driven by technological advancements, evolving roles, and a greater emphasis on holistic care (Rubin, 2024). The vision for future healthcare calls for a partnership between the health system, other sectors (education, transport, etc.), government and the public, to work together to build a "healthy and health-creating society". All parties will be responsible for building the conditions in which people can be healthy throughout the life course, i.e. addressing the social determinants of health. The 'Ottawa Charter for Health Promotion', signed in 1986, pushed for health promotion enabling people to increase control over and improve their health. This movement showed that health is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being (WHO, 2021). This is the backbone of recovery and thriving in a post-pandemic world. As familiar and trusted stewards of good health in schools, workplaces, public health facilities, correctional facilities, long-term care and home care, hospitals, and other community settings, nurses are leading to building a 'Culture of Health'. For this vision to succeed, the nursing profession must be actively involved and engaged (Stewart et al, 2021).

Objectives

The study was undertaken to (a) explore the opinions of nursing professionals regarding futuristic nursing, (b) find the correlation between opinions and selected variables, and (c) analyse the association between the vision of nursing professionals regarding futuristic nursing and demographic variables.

Need for the study: The future of nursing in India is bright, with opportunities for growth and innovation. With a growing demand for nursing professionals, attractive compensation packages, and flexible work schedules, nursing presents a great career opportunity for individuals looking to make a difference in healthcare. To succeed as a nursing professional in India, it is important to possess a range of key competencies, including clinical knowledge and expertise, communication skills, critical thinking and problem-solving skills, and strong relationships with colleagues. By embracing technology, engaging in continuing education and professional development, and building a strong support network, nursing professionals in India can continue to grow and succeed in their careers. With the Indian healthcare system undergoing significant transformation, nursing professionals have an important role to play. Given the bright future of nurses as investigators, we felt a need for strong leadership to uphold the dignity and, a better vision for the development of the nursing profession and nursing fraternity for futuristic nursing.

Review of Literature

Nourah Alsadaan, Basma Salameh, Linda Katherine Jones, et al (2023) studied the Impact of Nurse Leader's Behaviours on Nursing Staff Performance Nursing leadership, which is essential for providing quality care and ensuring patient safety. This study aimed to explore the relationship between nursing leadership and nurse performance by understanding the leadership behaviours and factors that motivate nurses to perform well. In a systematic review 51 elements that influence nurses' motivation to perform better were found and categorised into 6 parts: autonomy, competencies, relatedness, individual nursing characteristics, relationships & support, and leadership styles/practices. It was discovered that both direct and indirect nursing leadership behaviours affect nurses' performance. A better understanding of the factors motivating nurses to perform well, and facilitating them in the work environment through leadership behaviours/styles can improve nurses' performance. There is a need to increase research on nurse leadership to identify new factors of influence.

Sulaiman Al Sabei, Amy Miner Ross, Asma Al Yahyaei, Leodoro Labrague, Omar Al-Rwajfah, Kylee Deterding, et al (2024) conducted a study of the supportive nursing leadership environment to (1) assess the relationship between the leadership environment and the motivation of nurses to lead and (2) determine whether particular aspects of the leadership environment influence motivation to lead. A cross-sectional research design was used to collect data from 435 nurses working in 16 public and private hospitals in Oman. Leadership

Environment Scale and Motivation to Lead Scale were used to assess participants' perceived leadership environment and their motivation to engage in formal leadership roles. Nurses reported a mean scale value of 3.208 out of 5 (SD = 0.467) for their motivation to lead, which exceeds the midpoint, indicating a strong motivation to engage in formal leadership roles. Mean score was 3.194 out of 4 (SD = 0.661), which exceeds the midpoint, suggesting a favourable perception of the leadership environment. The findings showed a significant relationship between the leadership environment and nurses' motivation to lead. Specifically, self-organisation (β = 0.185, p = 0.001, CI = 0.086–0.378), agents (β = 0.221, p=0.002, CI = 0.124–0.474), and transformative exchange (β = 0.100, p=0.037, CI = 0.101–0.142) were characteristics of the leadership environment that were associated with greater motivation to engage in leadership. This study emphasised the importance of cultivating a supportive leadership environment as a potential strategy to attract nurses to assume formal nursing leadership roles.

Methods & Materials

It was an exploratory descriptive cross-sectional, multi-centre study conducted at different Government hospitals, primary health centres, and Government colleges of nursing in the State of Telangana. The samples consisted of nursing professionals working as nursing officers at government hospitals, primary health centres, and nurse educators from government colleges of nursing in Hyderabad and Secunderabad.

Sample size: Assuming a 95 percent confidence interval with a 10 percent margin of error and 50 percent precision, the sample size was 384. The opinionnaire was shared with 420 nursing professionals of different categories, assuming 422 as the sample size with 10% of sample attrition. We received only 329 responses.

Sampling technique: A purposive sampling technique was used to select the participants. Non-probability sampling method was used to select individuals with specific characteristics or expertise relevant to the research topic. Nursing professionals in significant positions with substantial experience in the healthcare system were targetted to provide informed and valuable insights.

Study variables: Age, gender, highest qualification, years of experience in nursing, current area of practice, the previous area of practice, sector of previous practice, attended any conferences/ workshops related to vision of nursing/ futuristic nursing/leadership in nursing.

Criteria for inclusion of sample: (a) Nursing officers working in government hospitals and primary health centres in Telangana, and (b) Nursing educators and administrators in government colleges of nursing in Telangana, who were willing to participate in the study.

Criteria for exclusion of sample: Nursing professionals who were not using smart phone.

Ethical considerations and informed consent: The study adhered to the ethical principles of human research and was approved by the Institutional Review Board (IRB) or Ethics Committee of the Government College of Nursing. Informed consent was obtained from all participants, who were briefed on the study's purpose, procedures, potential risks, benefits, and right to withdraw without penalty. Participant confidentiality was maintained, and data were securely stored and presented in an aggregate form to ensure privacy.

Data collection: After obtaining consent, the principal investigator collected opinions regarding futuristic nursing, by sending a Google form to the nursing professionals through WhatsApp number. Received responses at the investigator's email. Data was collected from 05.09.2024 to 25.10.2024 by three to four follow-up calls of reminders

Development and description of the tool: The proforma was prepared to collect sample demographic characteristics like age, gender, highest qualification, years of experience in nursing, current area of practice, previous area of practice, sector of previous practice and attended any conference/ workshops related to the vision of nursing/ futuristic nursing/leadership in nursing. Opinions of nursing professionals regarding the vision of futuristic nursing had six components. These are opinions with a Likert scale having 20 statements of strong agreement to strong disagreement prepared by the investigators. Negative statements were reverse scored, and the maximum score was 100. The score interpretation was done as the higher the score better the vision of nursing professionals regarding futuristic nursing. Both tools were submitted for validity to the experts in the field of administration and management.

Pilot study: A pilot study was conducted on 24.9.2024 on 30 nursing working at government hospitals, in Hyderabad and Secunderabad.

Validity: Content validity was achieved through a literature review and expert consultations, refining the tool to comprehensively cover the vision of Nursing professionals on futuristic Nursing. Construct validity was ensured by aligning items with relevant theoretical frameworks and verified

through a pilot test with a small sample. Validity was confirmed by expert review stating that the opinionnaire questions were appropriate for the study.

Reliability: Cronbach's alpha was used to check the internal consistency for reliability, the obtained value for opinionnaire was 0.714.

Data analysis: SPSS version 24 was used to analyse the data. Demographic variables and opinionnaire scores were computed using mean, SD and percentages. The chi-square test was used to find the association between the demographic variables and knowledge and attitudes. Pearson's correlation coefficient was used to find the relationship between opinionnaire. The p value was considered as 0.05.

Results

A total 329 of Nursing professionals participated in the study. All the Nursing professionals were able to respond to the opinionnaire freely. The opinionnaire was classified into positive and negative statements for analysis purposes. Positive statements with strong agreement were given a five (5) score and strong disagreement was given one (1) score. Negative statements with strong agreement were given one (1) score and strong agreement was given five (5) scores. The results were presented in Tables 1-4.

The Chi-square values and p-values assess associations between demographic/professional characteristics and participant responses, where a p-value>0.05 indicates no significant association.

Table 1: Frequency and percentage distribution of nursing professionals according to demographic data (N=329)

Variable	Distribution	Frequency	Percentage	Chi-square	p value
Age in years	21-30	110	33.4	9.395	0.153
	31-40	145	44.1		
	41-50	54	16.4		
	51-60	20	6.1		
Gender	Female	329	100	--	--
Highest educational qualification	Diploma	115	35.0	6.886	0.332
	Bachelor's degree	106	32.2		
	Master's degree	95	28.9		
	Doctorate (PhD/DNP)	10	3.0		
	Other	03	0.9		
Years of experience	Less than 5	120	36.5	10.770	0.096
	5-10	84	25.5		
	>10-20	83	25.2		
	>20-30	35	10.6		
	Above 30	07	2.1		
Current area of practice	Clinical nursing	193	58.7	3.551	0.470
	Education	110	33.4		
	Administration	04	1.2		
	Public health	17	5.2		
	Other	5	1.5		
Previous area of practice	Clinical nursing	211	64.1	3.873	0.423
	Education	80	24.3		
	Administration	5	1.5		
	Public health	26	7.9		
	Not applicable	07	2.1		
Sector of previous practice	Government	329	329	--	--
Conferences/workshops attended related to Leadership in Nursing	Yes	164	49.8	2.031	0.362
	No	165	50.2		

Table 2: Mean and SD of Opinion on a vision of nursing professionals on Futuristic Nursing (N=329)

Selected component	Maximum score	Mean	Median	SD
Being authentic & supportive	30	21.16	22.00	4.817
Working across discipline	10	6.24	6.00	2.247
Autonomy & authority	20	14.25	15.00	4.073
Addressing social needs	15	9.76	10.00	2.540
Enhancing visibility & image of nursing	15	10.26	11.00	2.471
Advocating for policy change	10	7.51	8.00	1.850
Total	100	69.18	72.00	17.998

Table 3: Association between opinions of selected components on the vision of nursing professionals regarding futuristic nursing and demographic variables (N=329)

Variable		Being Authentic & supportive	Working across disciplines	Authority & Autonomy	Addressing social needs	Enhancing visibility & image of nursing	Advocating for policy change
Age	χ^2	15.796	12.645	18.563	16.320	20.825	12.104
	p	0.015	0.049	0.005	0.012	0.002	0.060
Highest educational qualification	χ^2	16.151	37.332	16.005	15.973	5.658	14.332
	p	0.013	0.000	0.013	0.014	0.463	0.026
Years of experience	χ^2	11.042	13.147	13.873	14.613	22.244	20.063
	p	0.087	0.041	0.031	0.023	0.001	0.003
Current area of practice	χ^2	5.060	19.531	6.209	10.641	7.612	11.245
	p	0.281	0.001	0.184	0.031	0.107	0.024
Previous area of practice	χ^2	1.687	1.687	2.417	0.843	2.436	2.487
	p	0.206	0.793	0.660	0.933	0.656	0.647
Attended any workshop/ conference	χ^2	4.953	3.192	5.034	6.034	5.452	5.082
	p	0.106	0.203	0.084	0.049	0.065	0.079

The maximum scores of opinions on selected components of futuristic nursing, i.e., being authentic and supportive, working across disciplines, autonomy/authority, addressing social needs, efforts to enhance nursing's visibility and image, and advocating for policy change were 30, 10, 20, 15, 15 and 10 respectively. The obtained mean opinion score was 69.18 ± 17.998.

There was a statistically significant association ($p<0.05$) between age, education, years of experience and all the selected components of futuristic nursing, except advocating for policy change and enhancing visibility, the image of nursing, being authentic and supportive respectively. There was a statistically significant association ($p<0.05$) between the current area of practice and working across disciplines, addressing social needs, and advocating for policy change. There was a statistically significant association ($p<0.05$) between attending any workshop/ conference and addressing social needs. The association between previous areas of practice and all the selected components of futuristic nursing was statistically not significant.

Table 4: Correlation between strong agreements to strong disagreement on the vision of nursing professionals regarding futuristic nursing

Opinion	Pearson correlation	p value
Strong agreement vs strong disagreement	0.291	0.000

The correlation between the strong agreement and strong disagreement was statistically significant ($p=0.000$).

Discussion

The present study was an exploratory descriptive with cross-sectional design conducted among 329 Nursing professionals working at different Government hospitals, urban health centres and Government colleges of Nursing in Telangana

state, to explore the vision of Nursing professionals regarding futuristic nursing. This study would be a special of its kind as there were no similar studies published in recent times, especially during the post-COVID period, when the role of nursing leaders in the healthcare industry was well recognised.

The profession will require resources, autonomy, and positions of leadership. Across the coming decade, nurses will be key contributors to the substantial progress towards health and healthcare equity. They will be taking on expanded roles, working in new settings in innovative ways, and partnering with communities and other sectors. Achieving this vision will require much more rapid, substantive, and widespread efforts (Flaubert et al, 2021). Nahid Khalil Elfaki published a systematic review on challenges and future visions to improve nursing practice. Quality nursing care improves health outcomes, but quality nursing care cannot be provided without good vision. The major groups identified are six: financial, educational and training, clinical and working environment, technological, social and environmental determinants and multi-sectoral approach (Elfaki, 2019) International Council of Nurses document-2021 paved the path for futuristic nursing with the majority of components of leadership being supportive, working across disciplines, autonomy in decision making, re-imaging and addressing social determinants of health (Stewart et al, 2012).

The demographic distribution of the sample indicated that the majority (77.5%) were below the age of 40 years. All the samples (100%) were female, in Government service. Under graduate and post-graduate samples were 61.1 percent. The majority (87.2%) had less than 20 years of experience. Most of the nursing professionals (58.7% and 64.1%) were in clinical nursing in their current practice and their previous area of practice respectively. Half of the sample (49.8%) had attended conferences/ workshops related to leadership in nursing. The chi-square values and p-values indicate the associations between different categorical variables, with $p > 0.05$ implying no significant association. The opinions towards six selected components of futuristic nursing were obtained through statements of strong agreement and strong disagreement, with a total of 100 for 20 statements. The obtained mean opinion score was 69.18 ± SD 17.998. There is a positive correlation ($r=0.291$) between the set of positive and negative statements i.e., strong agreement to strong disagreement. There was a significant association between age and the ability to be authentic and supportive, interdisciplinary collaboration, autonomy/authority in practice, addressing social needs, and efforts to enhance nursing's visibility and image as $p <0.05$. The association between age and advocating for policy change was statistically not significant. There was a significant association between the highest educational qualification and the ability to be authentic and supportive, interdisciplinary collaboration, autonomy/ authority in practice, addressing social needs and policy change, as $p <0.05$. The association between the highest educational qualification and advocating for efforts to enhance nursing's visibility and image was statistically not significant.

Raso et al (2012) showed that during a pandemic year when nurse leaders rose to meet frontline leadership needs, there was a significant association between years of experience and interdisciplinary collaboration, autonomy/ authority in practice, addressing social needs, advocating for efforts to enhance nursing's visibility and image and policy change ($p <0.05$). Sample opined that addressing the social determinants of patient health such as housing, education, income and environmental factors shall be the focus of nursing leaders. The association between years of experience and the ability to be authentic and supportive was statistically not significant. There was a statistically significant association ($p<0.05$) between the current area of practice and working across disciplines, addressing social needs, and advocating for policy change. There was a statistically significant association ($p=0.049$) between attending any workshop/ conference and addressing social needs indicating that nursing professionals require sustained reinforcement of various components of futuristic nursing. Capacity building on the components would enlighten the vision of nursing professionals in futuristic nursing.

It was noted that the relationship between the previous area of practice and all the six selected components of futuristic nursing was statistically not significant.

Conclusion

Nursing professionals require sustained reinforcement, support and capacity building to enlighten their good vision on futuristic nursing. In the post-pandemic era, the constantly changing demands and challenges currently facing healthcare systems have significantly increased the complexity of hospital organisations. This requires critical evaluation and change in nursing leadership. Enhancing flexibility and authenticity in leadership, strengthening competencies, implementing a wide range of digital resources and

increasing the appeal of the nursing profession to build the next generation of nurses – all of these are needed to provide sustainability in future healthcare. A nursing vision towards futuristic nursing is as big as the profession, the study can be conducted in a large sample involving all the nursing professionals in the country for better vision and leadership Nurses should champion informatics across all areas of professional practice, create leadership opportunities in digital health, and inform health policy in this area.

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नर्सें बड़ी भूमिका संभालने के लिए तत्पर हो जाएं

बढ़ती आबादी और जटिल स्वास्थ्य चुनौतियों के चलते नर्सों की मांग लगातार बढ़ रही है। नर्स केवल वही स्वास्थ्यकर्मी नहीं जो अस्पताल में रोगी की टहल करे। वे लोगों को स्वस्थ जीवनशैली अपनाने के लिए भी प्रेरित करती हैं। शिक्षा, प्रशासन, और शोध जैस क्षेत्रों में नर्सों के लिए अवसर हैं जो निरंतर बढ़े जा रहे है। क्लीनिकों, नर्सिंग होम, स्कूलों, सैन्य और सरकारी विभागों में उनकी मांग बढ़ रही है। युवा नर्सों के लिए अध्यापन भी एक शानदार विकल्प है।

इस दृष्टि से नर्सों के लिए जरूरी है कि वे नई भूमिकाओं के लिए सजग रहें। बेहतर सेवा प्रदान करने के लिए मेडिकल साइंस में उन्नत उपकरणों का अधिकाधिक प्रयोग हो रहा है, इनके प्रचालन के लिए कुशल कर्मिकों का अभाव है। बेहतरीन कैरियर के लिए पहले नर्सों को विशेषज्ञता हासिल करनी होगी। ऐसे कुछ क्षेत्र हैं: गहन देखभाल, आपातकालीन चिकित्सा, बाल चिकित्सा, मानसिक स्वास्थ्य। कुछ निजी अस्पताल रोग–विशेष नर्सिंग कार्यक्रम चलाते हैं। देश में प्रशिक्षित नर्सों की किल्लत के अलावा विदेशों में इनकी भारी मांग सदा से रही है। बेशक नर्स से समाज की खासी अपेक्षाएं रहती हैं लेकिन उन्हें स्मरण रहे नर्सिंग सेवा क्षेत्र है। कार्य के बोझ से, कदाचित घंटों–घंटों ड्यूटी देने से उन्हें खिन्न नहीं होना है। अपनी सेवाओं से रोगियों, उनके परिजनों और समाज को वे जो योगदान देती हैं वह अतुल्य है। नर्सिंग में चुनौतियां कम नहीं किंतु भविष्य भी अथाह संभावनाओं से भरपूर है।