

Nurse's clinical skill utilisation: An opinion from public health institutions

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Research

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Abstract

Background

Nurses are the backbone of health care systems worldwide. In India the assessment of existing knowledge of nursing workforce and the utilization of skills is not evaluated and properly used to ensure good quality in health care.

Methods

Using the Delphi technique a survey was developed and sent to nurses. Self-rating methods (on a likert scale) were used in order to operationalize the personal skills.

Results

Almost half (48%) of the participants have a Bachelor degree. Out of this 27.2% qualified for a higher education (e.g. Master in related subject). Most nurses (56% in sample were females) are permanent employed working as staff nurse or nursing officers in the public sector. Among the participants 20% have sufficient teaching experience between 1 to 3 years. Self-rating of skills was high in almost all topics.

Conclusion

Having attained higher education most of the participants remain working as staff nurses. The good self-rating of participants underlines their ability to take over much higher positions and responsibilities. Moreover, teaching experience is hardly acknowledged by institutions since teaching staff is usually recruited from outside. The study suggests that a majority of the population has an interest to work in rural area. Better work conditions are needed in order to gain workforce in this areas.

Background

Admittedly, human resources for health, which are involved in the production, protection and improvement of population health, still remains as an underdeveloped zone without receiving much attention for metamorphosis. This situation pertains since decades in India, irrespective of the various measures employed by the World Health Organization (WHO) for the same. Unfortunately, India still lacks adequate health workforce. Nurses, being the backbone of health sector, play a pivotal role in placing the population into the trajectory of a healthy nation. However, they are not given appropriate power to implement various health measures, as observed in other developed countries. There is a wide disparity in the distribution of human resources, and there are major concerns based on their number, deployment, inadequacy of training as well as improper expertise mix. Mentioned disparities are usually observed along with poor human resource management, absence of appropriate career ladder, inadequate work conditions, and without much rooms for professional development [1,2]. Hence, it is the need of the hour to obtain adequate, latest and trustworthy data of this major workforce to obtain an evidence base, without which adequate planning would be inappropriate. It involves a delve into the matter, to analyze whether the right people are placed at right quantity in the right position, and without this information, a proper decision making in the health care

development, would be an impossibility [3]. It was found that many studies are not undertaken in this area and among this health care population.

Thus, a study was undertaken among the nurses working in public health institutions with the objective to assess the existing knowledge and skill utilization of nursing workforce in the public health sector.

Methodology

Survey method was adopted to achieve the defined objective. A tool was formed using the Delphi technique. A set of expertise were identified and the tool was sent to them to validation and the same was adopted. Google form inbuilt consent form was sent to a list of friends and later they sent to their known. A snow ball technique was used to select the convenient samples. Reminders were sent to the first set of known participants and then requested to spread a word among their friend group. There were 409 responses in total during the period of 30 days.

Result

Around half (48%) of the participants had Bachelors degree as a basic education, few of them had additional qualification like Bachelors in other subject, certificate courses related to skill, post graduate diploma in hospital management/administration and masters in other health subjects like Public Health, Human Resource management. Why the clinical nurses were pursuing additional and higher education is a question to be further evaluated.

More than $\frac{3}{4}$ of the participant's designation was clinical nurse/nursing officer, 56% were female, and 79.2% were permanent workers in the public health institutions.

Most of the participants want to work in the native places when they are provided with good working conditions. There were many studies reporting non availability of the specialist at rural public health institutions. Nurses who are experienced in the tertiary care hospitals with hand on skills are not allowed to go back and work in their native places. Around half of the participants had more than five years and $\frac{1}{4}$ of the participants had more than a decade of clinical experience.

Mean clinical experience among the clinical nurses is higher than non- clinical and mean teaching experiences among the non- clinical higher than clinical nurses and statistically significant. It is the point to note that among the clinical nurses there are 20.4 % of them completed and having teaching experiences of 1.3 ± 2.8 years and clinical experiences of 8 ± 6.5 years. Most of these tertiary hospital are attached with nursing institutions are doing direct recruitment of the teaching staff rather than promoting these skilled nurses with adequate qualification within an institution.

Discussion

Nurses and their demographic profile

In the study, it was found that the larger population had Bachelor's Degree (48%) and it almost constituted half of the population. The remaining half was almost equally composed of Diploma holders and post graduates. However, this is in contrast to the Delhi Nursing Council (DNC) Statistics of 2015, where the largest group was that of Diploma holders (55.1%), followed by that of B.Sc Nurses (39.4%) and the least (5.5%) was that of auxiliary nurses. Unfortunately, they did not have an account of the nurses who have attained any other higher degrees.

A characteristic, which was revealed from the study, was that the larger proportions of nurses (55.9%) were females. Only 42.4% were males, and 1.7% of the population, did not mention their gender. These findings are similar to a study conducted among few Western countries, assess the health workforce, in which it was proved that about 62% of health sector was occupied by women and it was attributed that this skew was due to the female dominance in nursing. It was also commented in the study that nursing, inspite of being a highly complex skilled profession, has not received a market value in accordance to the level of skills involved in it, courtesy, perception of it as "women's work" [4].

Nurses' interest to work in rural or urban areas

The study suggests that a majority of the population has an interest to work in rural areas. However, as per the WHO report on human workforce, only 39.6% of nurses work in rural sector and among them, only 9.9% of them had a medical qualification. The rest 67.1 % had qualification less than secondary schooling, 9.3% had technical or non- technical diploma, 23.7% had basic or post graduate degree. Also, 73 districts had no nurses with a medical qualification [5]. According to the study, about 85.5% of the nurses are working in public sector. But, this is in contrast to the study done by Karan et al [6], where about three- fourth of the nurses were employed in private sector. An appropriate and equal distribution of nurses in rural and urban areas, and in public and private sector is a mandate to ensure universal access to healthcare.

Utilization of nursing competencies- skill and knowledge

According to the study, when the participant nurses were asked to rate the utilization of their knowledge on a 5- point scale, the highest proportion of them rated it as 4 and 5, accounting to about 28.9% and 28.2%, respectively. At the same time, 19.9 % of them rated it at 3, 8.8% at 2 and 7.6% at 1. On the other hand, when the utilization of skills were assessed, largest group of them, that is 30.6% and 27.7% of them felt that it was at 5 and 4, on the rating scale, respectively. However, 34.8% of them felt that their skills were under- utilized, irrespective of the high level of training and expertise they have attained. About 6–7% of participants missed to give this information. Though there are few studies on assessing the competencies of nurses, this was a pioneer study in the perception of the extension to which nursing competencies are exploited.

Conclusion

Nurses, the mainstay of health sector face many challenges today, which demands an interrogation and analysis into the situation. We have an ample supply of qualified nurses, but their skills and abilities remain obscure, as they lack adequate and fair opportunities. If these skills are effectively utilized in areas of administration, management, research and education, with a proper distribution to rural and urban areas, there is no doubt that, we will be able to raise the health standards of our nation to its peak. It is

recommended that, in institutions where nursing colleges are also a part of it, they should try to recruit the nursing faculty, within themselves, at least a higher percent of the seats if reserved for them, would be beneficial for both the parties. This would not only motivate the employees of the institution, but also, would aid in reducing the cost burden for the employer in appointing and training an external candidate.

If all these pitfalls of nursing workforce are not addressed in the right manner, at the right time, our well-qualified expert nurses will go in search of greener pastures to foreign nations, where they can grow multi-dimensionally, thereby, resulting in a crisis in our nation's healthcare sector, with acute shortage of efficient nurses in the near future itself.

Abbreviations

World Health Organization (WHO)

BSc N – Bachelor of Science Nursing

GNM – General Nursing and Midwifery

MSc N – Masters of Science in Nursing

PhD – Doctorate of Philosophy

DNC - Delhi Nursing Council

BA – Bachelor of Arts

CHO – Community health officer

PHN – Public Health Nurse

Declarations

Ethics approval and consent to participate

The consent has been obtained from the Participants of this study.

Consent for publication

The consent has been obtained from the Participants of this study.

Availability of data and material

Data and material are available from the authors.

Competing interests

All authors declare no competing interests.

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Authors' contributions

All authors developed the study and wrote the manuscript.

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Tables

Table 1: Baseline information of the participants

Variables	Frequency	Percentage
Educational status		
General Midwifery and Nursing	101	24.8
BSc	196	48.0
MSc	103	25.2
PhD	8	2.0
Additional qualification		
None	325	79.6
Bachelor of Arts	11	2.7
Certificate	15	3.7
Diploma	28	6.8
Masters	27	6.6
Multiple	2	.5
Designation		
Clinical Nurse	311	76.2
Nurse educator	54	13.2
Research	20	4.9
Supervisor	8	2.0
Community Health Officer (CHO)	5	1.2
Public Health Nurse (PHN)	5	1.2
Unemployed	5	1.2
Type of contract		
Contract	85	20.8
Permanent	323	79.2
Years of clinical experience		
Up to 5 yrs	208	51.0
5 – 10	96	23.5
10-15	62	15.2
15-20	17	4.2
20 +	25	6.1

Teaching experience		
No	212	52
0-5	154	37.7
5-10	22	5.4
10 +	20	4.9
Utilization of knowledge		
1.0	31	7.6
2.0	36	8.8
3.0	81	19.9
4.0	118	28.9
5.0	115	28.2
Missing	27	6.6
Utilization of Skill		
1.0	25	6.1
2.0	33	8.1
3.0	84	20.6
4.0	113	27.7
5.0	125	30.6
Missing	28	6.0
Rural area work		
No	42	10.5
Yes	310	76.0
May be	55	13.5
Specialty		
No	63	15.4
Yes	304	74.5
Not mentioned	41	10
Gender		
Female	228	55.9

Male	173	42.4
Not mentioned	7	1.7
Institution		
Public	349	85.5
Private	46	11.3
Not mentioned	13	3.2

Table 2: Cross table between the qualification and clinical nurses

	Clinical		Non clinical		P Value
	Frequency	Percentage	Frequency	Percentage	
GNM	85	25.8%	15	20.3%	.000
BSc N	176	53.5%	18	24.3%	
MSc N	67	20.4%	34	45.9%	
PhD	1	.3%	7	9.5%	
Total	329	100%	74	100.0%	

Table 3: Comparison of clinical and non clinical nurses with their clinical and teaching experiences

		N	Mean	Std. Deviation	Std. Error Mean	P Value
Clinical experience	Clinical	329	7.998	6.5274	.3599	.001
	Non Clinical	74	5.014	6.7634	.7862	
Teaching experience	Clinical	329	1.2678	2.79670	.15419	.000
	Non Clinical	74	5.7677	6.74320	.78388	