



Scopes of utilization of public health specialist nurses in government health care service of Bangladesh

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ABSTRACT

The nursing profession is undoubtedly a very important part of health care service. Public Health Nurses use their specialized knowledge, experience, and skill set to initiate life-saving measures, improve and promote the health and well-being. This study was aimed to find out the scopes of utilization of public health specialist nurses, their socio-demographic characteristics, expectations, training status and satisfaction in government health care service. The study was descriptive cross-sectional study. Data was collected through semi structured questionnaire by direct interviewing, telephone interviewing and e-mailing among 127 respondents who had completed their MPH degree from NIPSOM and engaged in government service for minimum 3 years. Among 127 of respondents 81% was female and 19% was male and highest number of respondents 34.6% belongs to the age among 41- 45 years. Majority (78%) of the respondents gave opinion that they had no professional utilization as PHN in the government health sector. About 73.2% of respondents agreed that can getting scope to utilize their MPH educational knowledge in their working area, and most of them (83.9%) opined that they can utilize their knowledge in health education. Maximum 58.3% respondents completed MPH with the hope of becoming nursing teacher. Though 58% of respondents were giving clinical nursing service and among them 40.9% of respondents remained in same position after completing higher education. The 76% of respondents expected from central authority for the specialization of public health nursing post (DPHN) and they also wanted to more working scope in public health sector like upazila level to central level. About 59.8% of respondents didn't get any training for their professional skill development and 67.7% were not satisfied in their present working position. Without utilizing PHSN properly health sector will remain incomplete. So, the study will help to create an opportunity to think about utilizing public health specialist nurses and for achieving different post need to create in every tire of health.

INTRODUCTION

Bangladesh has achieved significant progress in health and population indicators over the last few years through a combination of facility level, community and household level service provision strategies. The fertility transition is already underway in the country and the success of the immunization program is most impressive, including reduction in infant and child mortality. Compared to many other developing countries, Bangladesh has a relatively developed public infrastructure of health facilities as well as a relatively extensive human resource base for the delivery of health and family planning services. There is an extensive network of hospitals, health

centers, dispensaries and training centers in Bangladesh. This network at the district level and below, comprises 64 district hospitals, 428 health complexes at the upazila level (UHCs), about 4,000 health and family welfare centers (HFWCs) at the union level and thousands of community clinics (11,000-13,000) at the ward level, some selected UHCs have given EOC services (Mannan et al., 2013).

In Bangladesh there is only one recognized post for public health nurses in government health care service is District Public Health Nurse (DPHN). The number of posts of DPHN is 64 in 64 Districts, among these 23 posts are vacant. In these 23 posts senior staff nurses are acting as

DPHN. Eligibility for these posts is graduation on nursing or public health nursing, and minimum five years working experiences in the position of senior staff nurse, public health nurse or supervisor. National Institute of Preventive and Social Medicine (NIPSOM) is a renowned post-graduation institute of the country in the field of Public health. To develop public health workforce, to conduct research and to provide consultancy advisory support to PHC services it was established at 1974. Then NIPSOM was started its academic session in 1978. NIPSOM conduct one MPhil course and eight MPH program from different discipline of public health. The institute is affiliated to the Bangabandhu Sheikh Mujib Medical University, Dhaka. The disciplines MPH are Community Medicine, Community Nutrition, Epidemiology, Hospital Management, Health Promotion & Health Education, Health Service Management & Policy, Occupational and Environmental Health, Reproductive & Child Health. Different medical professionals like doctor, dentist, nurse, paramedics etc. get the opportunity to study here. Once Nurses had the opportunity to study in only one subject that was Health Promotion & Health Education (HP & HE). Now a days they are getting opportunity to study in four disciplines these are Hospital Management (HM), Health Promotion & Health Education (HP & HE), Health Service Management & Policy (HSMP) and Community Nutrition (CN).

In COVID – 19 situations we can understand the demands and challenges of public health. A sustainable public health nursing workforce is vital for building public health capacity. The need to strengthen public health infrastructure and capacity is widely recognized, including provision for surge capacity, emergency planning, and activities to address social health determinants within communities. Public health nurses (PHNs) are the largest group within the public health workforce, support for them to work effectively will improve public health service delivery and outcomes. Due to COVID-19, there is a great need for more healthcare professionals in all scopes of practice. As responders to public health emergencies, Public Health Nurses play a major role in providing care to the communities in which they serve. Their role during a pandemic involves providing education, especially to those that have

tested positive or been exposed and need to isolate. They also participate in hotlines where the community members can call with questions and give up to date information from the Center for Disease Control. The role of the PHN encompasses promoting healthy lifestyles, identifying people at risk for diseases, and aid in disease prevention which are all ever so important currently.

To become a Public Health Nurse (PHN), one must be a Registered Nurse, licensed by the country and must possess a Baccalaureate Degree. The specialist level competencies require preparation at the Master's level in community and /or public health. The MPH degree usually has a strong international focus, demonstrating the crucial role these professionals play in global health outcomes.

In Bangladesh there is only one post for nurse in public health sector called district public health nurse (DPHN). However, there are so many nurses in our health sector have MPH degree both in government and privet organization. They involved themselves in various types of activities like teaching, research, leadership, administration, NGOs etc.

In Bangladesh, if we want to achieve the SDG we have to emphasize on strengthen the public health sector. Ensure healthy lives and promote wellbeing for all ages, and clearly nursing has a major role to play in relation to SDG 3. But the work of nurses also has a major impact on the delivery of other SDGs such as education and poverty.

The aim of this study was to find out the scopes of Utilization of Public Health Specialist Nurses in Government Health Care Service of Bangladesh. However the specific objectives were to find out the opportunities to work as a Public Health Specialist Nurses in Bangladesh Government Care Health Service. And to determine the expectations and satisfaction of work of Public Health Specialist Nurses in their work field.

MATERIALS AND METHODS

The study

The study was performed in National Institute of Preventive and Social Medicine (NIPSOM) and Director General of Nursing and Midwifery (DGNM) from 1st January 2020 to 31st December 2020. Cross sectional descriptive method was used to assess demographic profile, MPH education related information, working organization related information and also for working skill related information.

Data collection and analysis

Data were collected by telephone interview, email and face-to-face interviewing while possible due to COVID-19 situation. A pre-tested questionnaire was used to collect data targeting the objectives. Data were collected, compiled and tabulated according to variables that processed and developed through SPSS version 26. Descriptive analysis has reported as frequency, percentage & cross tabulations.

Ethical consideration

After protocol was approved by protocol approval committee of NIPSOM, ethical clearance of this study was obtained from the Institutional Review Board (IBR) of NIPSOM. Written informed consent was taken from every participant during direct interviewing. During data collection over telephone, it was also informed to every participant about terms, conditions and rights to them before starting the interview.

Table 1: Distribution of Respondents According to the demographic characteristics (n=127)

| Socio-Economic Characteristics | Status | Percentage |
|--------------------------------|------------------|------------|
| Age | 30 - 35 years | 10.2% |
| | 36 - 40 years | 19.7% |
| | 41 - 45 Years | 34.6% |
| | 46 - 50 years | 27.6% |
| | 51 - 55 Years | 5.5% |
| | 56 years & older | 2.4% |
| Sex | Female | 81% |
| | Male | 19% |
| Religion | Muslim | 75.6% |
| | Hindu | 18.9% |
| | Christian | 3.9% |
| | Buddhist | 1.6% |

| | | |
|------------------------------------------|----------------------------------------------|-------------|
| Marital status | Married | 91.3% |
| | Unmarried | 8.7% |
| Educational qualifications | MPH | 89% |
| | MSN | 7.90% |
| | PhD | 3.10% |
| Core subjects | Community Nutrition (CN) | 3.9% |
| | Hospital Management (HM) | 29% |
| | Health Promotion & Health Education (HP&HE), | 35.4% |
| | Health Service Management & Policy (HSMP) | 16.6% |
| | Occupational and Environmental Health (OEH) | 0.8% |
| | Reproductive & Child Health (RCH) | 14.2% |
| | Location of organization | Urban |
| | Rural | 10 (7.9 %) |
| | Peri urban | 30 (23.6%) |
| Working Unit | Hospital | 74 (58.3%) |
| | Educational Institute | 50 (39.4%) |
| | Administrative Position | 3 (2.4%) |
| Satisfaction on Present Working Position | Yes | 41 (32.3%) |
| | No | 86 (67.7%) |
| Job experiences in present position | 1 - 3 years | 42 (33.1%) |
| | >3 - 5 years | 30 (23.6%) |
| | > 5- 10 years | 35 (27.6%) |
| | > 10 years | 20 (15.7%) |
| Skill Development Training | Yes | 51 (40.2%) |
| | No | 76 (59.8%) |
| Scope with MPH Knowledge | Yes | 93 (73.2%) |
| | No | 34 (26.8%) |
| Scopes of work with MPH Knowledge | Managerial work | 59 (63.40%) |
| | Health education | 78 (83.90%) |
| | Research | 13 (14%) |
| | Administration | 7 (7.50%) |

In this study, that the maximum number of respondents 44 (34.6%) out of 127 were belong to 41 -45 years age group and only 3 (2.4%) of respondents are belong to 56 years and older. 19%

(24 out of 127) respondents were males and 81% (103 out of 127) were females. 91.3% of respondents were married and other 8.7% of respondents were single. Most of the respondents 75.6% were Muslim and the minimum number of respondents 1.6% are Buddhist and other 18.9% are Hindu and 3.9% are Christen (Table 1).

The table 1 also shows that 127 (100%) all respondents have completed MPH degree and among them 10 (7.90%) out of 127 have also completed MSN and 4 (3.10%) of respondents have completed their PhD degree. Most of the respondents 87 (68.5%) lives in urban area and few of the respondents 10 (7.9%) lives in rural area. Most of the respondents 58.3% are working in hospital, 39.4% of respondents are working in educational institute and only 3 (2.4%) of them are working in administrative position.

The Table 1 shows that majority 67.7% of respondents was not satisfied and 32.3% of respondents were satisfied in their current working position. Maximum number 42 (33.1%) of respondents have 1-3 years working experiences, 30 (23.6%) have >3-5 years, 35 (27.6%) have >5 – 10 years and only 20 (15.7%) have >10 years working experiences in their present working position.

The study shows that 76 (59.8%) of the respondents don't get any training for skill development where 51 (40.2%) respondents have received skill development training that is essential for effective job performance (Table 1).

Most of the respondents have said that they can use their MPH educational Knowledge in working area, but 34 (26.8%) said that they have no scope about it. Among 93 respondents 83.90% can give health education, 63.40% can use their knowledge in managerial work, 14% in research and 7.50% in administrative work. Maximum number of respondents 45 (35.4%) have completed their MPH in HP & HE and the minimum number in OEH 1 (0.8%) (Table 1).

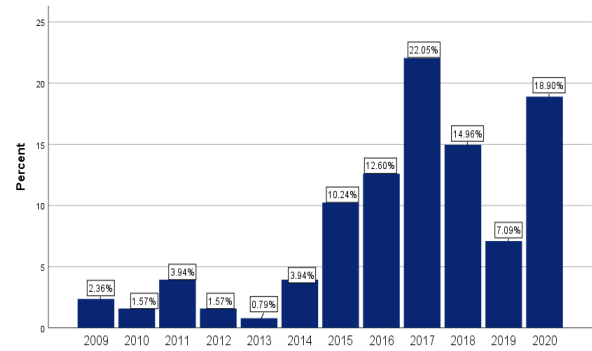


Figure 1: Distribution of respondents according to their passing year of MPH education

The figure 1 shows that maximum number (22.05%) of respondents have completed their degree in 2017 and minimum number shows in 2013 is 0.79%.

The figure 2 shows that maximum number 28 of 127 respondents passing at the year of 2017, among them 1 in CN, 8 in HM, 7 in HP&HE, 6 in HSNP and RCH passed MPH. minimum number 2 out of 127 respondents had passed form HP&HE in the year of 2010 and 2012.

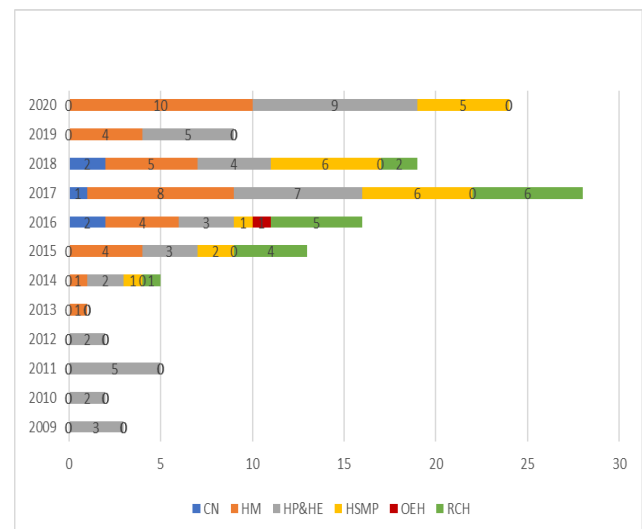


Figure 2: Distribution of respondents according to their passing year and MPH core subjects.

Table 2: Distribution of Respondents According to Their purpose of Choosing MPH degree (n=127)

| Reasons for choosing MPH | Multiple response with % | Single response with % |
|-----------------------------------------------|--------------------------|------------------------|
| Just want to acquire a degree | 10 (7.90%) | - |
| No opportunity of other degree without MPH | 50 (39.40%) | 6 (12%) |
| Have Graduation on public Health Nursing | 43 (33.90%) | - |
| Interested to develop career in Public Health | 66 (52.00%) | 17 (25.7%) |
| NIPSOM is best educational institute | 90 (70.90%) | 15 (16.6%) |

The table 2 shows that maximum respondents 90 (70.90%) have chosen MPH degree because they felt NIPSOM is best educational institute with other reasons and among them 15 (16.6%) of respondents choose MPH only for NIPSOM is best. The 66 (52.00%) of respondents were interested to develop career in public health with other reasons and 17 (25.7%) of them had this only reason for choosing MPH. The minimum number of multiple responses 10 (7.90%) of respondents just wanted to acquire a post-graduation degree, subject or division didn't matter to them. The number 50 (39.40%) of respondents said that they had no opportunity of other post-graduation degree without MPH in the country and 6 (12%) of them had chosen only that reason.

Table 3: Distribution of respondents according to their professional expectation during MPH, (n=127)

| Expectations during MPH education program | Multiple responses with % | Single response with % |
|------------------------------------------------------------|---------------------------|------------------------|
| For proportioning in managerial or administrative position | 49 (38.60%) | 13 (26.53%) |
| For involving in teaching | 74 (58.30%) | 31(41.89%) |
| For being confident and effective in self working area | 70 (55.10%) | 25 (35.71%) |

The table number 3 shows that majority 74 (58.30%) of the respondents had aimed to involve in teaching with other options but among 31 (41.89%) of them had only aimed to be nursing teacher. The 70 (55.10%) of respondents had expectation to be more confident and effective in their work field with many other expectations but among 25 (35.71%) of them response singly to be confident and effective in their work field.

Table 4: Distribution of Respondents According to Their utilization as PHSN in Govt. Health Care Service, (n=127)

| Utilization of PHSN in government health care service | Frequency with % |
|-------------------------------------------------------|------------------|
| Yes | 28 (22%) |
| No | 99 (78%) |
| Total | 127 (100%) |

The table number 4 shows that maximum number 99 (78%) of respondents thinks that they have no scope of utilizations as public health specialist nurse in government health care service, on the other hand 28 (22%) of respondents thinks that they have proper utilization.

Table 5: Distribution of Respondents According to Their Expectation as PHSN from Central Authority (n=99)

| Expectation as PHSN from central authority | Multiple response with % | Single response with % |
|------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------|
| DPHN post should be more specialized and working scope should be established from root to central level for PHSN | 77 (76.8%) | 5 (6.49%) |
| More scopes to work in research setting | 41 (41.4%) | 1 (2.43%) |
| Working position and promotion according to merit and skill | 89 (89.9%) | 16 (17.97%) |

The table 5 shows that most of the respondents 89 (89.9%) wants working position and promotion according to their merit and skill among them 16 (17.97%) of respondent's response singly for this. And 77 (76.8%) of them want specialization of

DPHN post and 41 (41.4%) of respondents expect more scope to work in research setting.

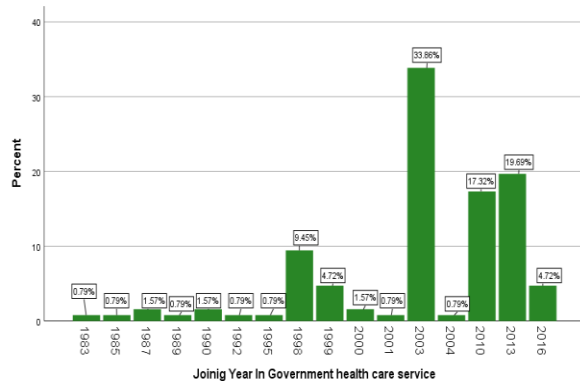


Figure 3: Distribution of respondents according to their joining year in government health care service

The figure 3 showed that 33.86% of respondents have joined in government health service in year of 2003 and the minimum number of respondents 0.79% have joined in year of 1983, 1985, 1989, 1992, 1995, 2001 and 2004.

Table 6: Distribution of respondents according to their types of organization, (n=127)

| Types of organization | Frequency with % |
|------------------------------|------------------|
| Primary level hospital | 9 (7.1%) |
| Secondary level hospital | 8 (6.3%) |
| Tertiary level hospital | 57 (44.9%) |
| Nursing college or Institute | 50 (39.4%) |
| Administrative level | 3 (2.4%) |
| Total | 127 (100%) |

The table 6 shows that 57 (44.9%) of respondents work in tertiary level hospital, 50 (39.4%) in Nursing college or institute, 9 (7.1%) in primary level hospital, 8 (6.3%) in secondary level hospital only 3 (2.4%) of respondent works in administrative level.

The table 7 shows that 40.9% of respondents are working as senior staff nurse, only 1 (0.8%) are working as DPHN, Asst. professor and Principal, and 15.7% and 22% of respondent working as Lecturer and Instructor.

Table 7: Distribution of respondents according to their current working position, (n=127)

| Working Position | Frequency with % |
|------------------------------|------------------|
| Senior staff nurse | 52 (40.9%) |
| Ward in charge | 22 (17.3%) |
| Supervisor | 2 (1.6%) |
| Lecturer | 20 (15.7%) |
| Instructor | 28 (22%) |
| District public health nurse | 1 (0.8%) |
| Asst. professor | 1 (0.8%) |
| Principal | 1 (0.8%) |
| Total | 127 (100%) |

Table 8: Distribution of Respondents According to Their Interest of Work, (n=127)

| Working area | Multiple response with % | Single response with % |
|----------------------------|--------------------------|------------------------|
| General Nursing | 18 (14.20%) | 3 (16.6%) |
| Administration/ Management | 41 (32.30%) | 7 (17.07%) |
| Teaching | 99 (78%) | 29 (29.29%) |
| Research | 42 (33.10%) | 3 (7.14%) |
| Total | 200 (157.50%) | 42 (21%) |

The table 8 shows that, most of the respondents 78% are interested to work in teaching with other area also but among them 29.29% are interested only in teaching. Only 14.20% of respondents show interest for general nursing with other multiple responses among them only 3, (16.6%) has shown interest for general nursing.

The table 9 shows that among 81.1% of female respondents 38.6% are working in tertiary level hospital, 29.9% in nursing college or institute and only 2.4% in administrative level. Among 18.9% of male respondents 9.4% are working in Nursing college or institute and 6.3% in tertiary level hospital.

The table 10 shows that among 81.1% of female respondent's 33.1% working as SSN, 15.7% as ward in charge, 18.1% as lecturer. Among 18.9% of male respondents maximum 4.7% working as Lecturer and 3.9% as instructor.

Table 9: Distribution of respondents according to sex with their working unit, (n=127)

| Working Unit | Sex | | Total |
|------------------------------|------------|-------------|------------|
| | Male | Female | |
| Primary level hospital | 3 (2.4%) | 6 (4.7%) | 9 (7.1%) |
| Secondary level hospital | 1 (0.8%) | 7 (5.5%) | 8 (6.3%) |
| Tertiary level hospital | 8 (6.3%) | 49 (38.6%) | 57 (44.9%) |
| Nursing college or Institute | 12 (9.4%) | 38 (29.9%) | 50 (39.4%) |
| Administrative level | 0 (0%) | 3 (2.4%) | 3 (2.4%) |
| Total | 24 (18.9%) | 103 (81.1%) | 127 (100%) |

Table 10: Distribution of respondents according to their sex with working position (n=127)

| Present working position | Sex | | Total |
|------------------------------|------------|-------------|------------|
| | Male | Female | |
| Senior staff nurse (SSN) | 10 (7.9%) | 42 (33.1%) | 52 (40.9%) |
| Ward in charge | 2 (1.6%) | 20 (15.7%) | 22 (17.3%) |
| Supervisor | 0 (0%) | 2 (1.6%) | 2 (1.6%) |
| Lecturer | 6 (4.7%) | 14 (11%) | 20 (15.7%) |
| Instructor | 5 (3.9%) | 23 (18.1%) | 28 (22%) |
| District public health nurse | 0 (0%) | 1 (0.8%) | 1 (0.8%) |
| Asst. professor | 0 (0%) | 1 (0.8%) | 1 (0.8%) |
| Principal | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Total | 24 (18.9%) | 103 (81.1%) | 127 (100%) |

Table 11: Professional expectation of respondent during their MPH degree according to their working position, (n=127)

| Present working position | Expectation during MPH Education | | | Total |
|------------------------------|---------------------------------------------------------|------------------------------|---------------------------------------------------|------------|
| | For proportioning in managerial administrative position | For involving in or teaching | For being confident and effective in working area | |
| Senior staff nurse (SSN) | 21 (16.5%) | 34 (26.8%) | 29 (22.8%) | 52 (40.9%) |
| Ward in charge | 9 (7.1%) | 14 (11%) | 9 (7.1%) | 22 (17.3%) |
| Supervisor | 0 (0%) | 1 (0.8%) | 2 (1.6%) | 2 (1.6%) |
| Lecturer | 7 (5.5%) | 11 (8.7%) | 12 (9.4%) | 20 (15.7%) |
| Instructor | 11 (8.7%) | 12 (9.4%) | 17 (13%) | 28 (22%) |
| District public health nurse | 1 (0.8%) | 0 (0%) | 0 (0%) | 1 (0.8%) |
| Asst. professor | 0 (0%) | 1 (0.8%) | 1 (0.8%) | 1 (0.8%) |
| Principal | 0 (0%) | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Total | 49 (38.6%) | 74 (58.3%) | 70 (55.1%) | 127 (100%) |

It is observed that 38.6% of respondents expected to get promotion in managerial or administrative position during their MPH education. But among them 16.5% of respondents have no change in position, they are working as SSN, 7.1% as ward in charge, 5.5% as Lecturer and 8.7% as Instructor among them. 58.3% of respondents had expectation to involve themselves in teaching among them 26.8% have no change in their working position, 11% as ward in charge, 8.7% as lecturer, 9.4% as instructor and 0.8% as principal and asst. professor are working now. The 55.1% of respondents wanted to make themselves more effective and confident in their working area (Table 11).

The table 12 shows that 40.9% of respondent are SSN and 18.1% of them are working in this same position for >10 years. The 17.3% of respondents are ward in charge 15.7% of them have 1- 3 years working experience. About 15.7% are in lecturer position and most of them 10.2% working for >3 – 5 years. The 22.0% of respondents are instructor among them 7.9% are working for >5-10 years and 0.8% of respondents are district public health nurse, Asst. professor, and Principal among them DPHN working for >5 – 10 years and Asst. professor, and Principal working for 1 – 3 years in their position.

Table 12: Job Experiences of respondents in Current Position according to their Working Position, (n=127)

| Working position | Job Experiences in Current Position | | | | Total |
|------------------------------|-------------------------------------|--------------|---------------|------------|------------|
| | 1 – 3 Years | >3 – 5 Years | >5 – 10 Years | >10 Years | |
| Senior staff nurse (SSN) | 0 (0.0%) | 8 (6.3%) | 21 (16.5%) | 23 (18.1%) | 52 (40.9%) |
| Ward in charge | 20 (15.7%) | 2 (1.6%) | 0 (0%) | 0 (0%) | 22 (17.3%) |
| Supervisor | 1 (0.8%) | 1 (0.8%) | 0 (0%) | 0 (0%) | 2 (1.6%) |
| Lecturer | 6 (4.7%) | 13 (10.2%) | 1 (0.8%) | 0 (0%) | 20 (15.7%) |
| Instructor | 9 (7.1%) | 8 (6.3%) | 10 (7.9%) | 1 (0.8%) | 28 (22.0%) |
| District public health nurse | 0, (0%) | 0 (0%) | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Asst. professor | 1 (0.8%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.8%) |
| Principal | 1 (0.8%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (0.8%) |
| Total | 38 (29.9%) | 32 (25.2%) | 33 (26.0%) | 24 (18.9%) | 127 (100%) |

Table 13: Satisfaction of respondents in present position according to working position, (n=127)

| Working Position | Satisfaction in present position | | Total |
|------------------------------|----------------------------------|-------------|------------|
| | Yes | No | |
| Senior staff nurse | 11 (8.7) | 41, (32.3%) | 52 (40.9%) |
| Ward in charge | 7 (5.5%) | 15 (11.8%) | 22 (17.3%) |
| Supervisor | 1 (0.8%) | 1 (0.8%) | 2 (1.6%) |
| Lecturer | 8 (6.3%) | 12 (9.4%) | 20 (15.7%) |
| Instructor | 13 (10.2%) | 15 (11.8%) | 28 (22.0%) |
| District public health nurse | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Asst. professor | 0, (0%) | 1 (0.8%) | 1 (0.8%) |
| Principal | 0, (0%) | 1 (0%) | 1 (0.8%) |
| Total | 41, (32.3%) | 86 (67.7%) | 127 (100%) |

The table 13 shows that, most of the respondents were senior staff nurse (40.9%) among them 32.3% are not satisfied, among 17.3% of ward in charge 11.8% are not satisfied, 15.7% of respondent are lecturer and among them 9.4% are not satisfied. Among 22.0% instructor 11.8% are not satisfied in their present working position.

The table 14 shows that most of the respondents (40.9%) were senior staff nurse. Among them 33.1% have said that they have no opportunity to utilize as PHN in their working area, and 13.4% of 17.3% of ward in charge have expressed the same things. The 1.6% of supervisor, 0.8% of Asst. professor, Principal gave the same opinion that they also have no opportunity to utilization as PHN in government health sector.

Table 14: Scope of utilization to work as PHSN in government health care service according to their working position, (n=127)

| Working Position | Scope of utilization as PHSN | | Total |
|------------------------------|------------------------------|------------|------------|
| | Yes | No | |
| Senior staff nurse | 10 (7.9%) | 42 (33.1%) | 52 (40.9%) |
| Ward in charge | 5 (3.9%) | 17 (13.4%) | 22 (17.3%) |
| Supervisor | 0 (0%) | 2 (1.6%) | 2 (1.6%) |
| Lecturer | 6 (4.7%) | 14 (11%) | 20 (15.7%) |
| Instructor | 6 (4.7%) | 22 (17.3%) | 28 (22%) |
| District public health nurse | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Asst. professor | 0 (0%) | 1 (0.8%) | 1 (0.8%) |
| Principal | 0 (0%) | 1 (0.8%) | 1 (0.8%) |
| Total | 28 (22%) | 99 (78%) | 127 (100%) |

Table 15: Expectation of respondents from central authority according to their working position (n=99)

| Working position | Expectation from central authority | | | Total |
|--------------------------|------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------|------------|
| | DPHN post should be specialized from root to central level | More scopes to work in research & create working scope setting | Working position according to merit and skill | |
| Senior staff nurse (SSN) | 32 (32.3%) | 21 (21.2%) | 37 (37.4%) | 42 (42.4%) |
| Ward in charge | 16 (16.2%) | 7 (7.1%) | 17 (17.2%) | 17 (17.2%) |
| Supervisor | 2 (2%) | 2 (2%) | 2 (2%) | 2 (2%) |
| Lecturer | 9 (9.1%) | 4 (4%) | 12 (12.1%) | 14 (14.1%) |
| Instructor | 16 (16.2%) | 6 (6.2%) | 19 (19.2%) | 22 (22.2%) |
| Asst. professor | 1 (1%) | 1 (1%) | 1 (1%) | 1 (1%) |
| Principal | 0 (0%) | 0 (0%) | 1 (1%) | 1 (1%) |
| Total | 76 (76.8%) | 41 (41.4%) | 89 (89.9%) | 99 (100%) |

Table 16: Status of skill development training of respondent according to their working position, (n=127)

| Working Position | Skill Development Training | | Total |
|------------------------------|----------------------------|------------|------------|
| | Yes | No | |
| Senior staff nurse | 20 (15.7%) | 32 (25.2%) | 52 (40.9%) |
| Ward in charge | 9 (7.1%) | 13 (10.2%) | 22 (17.3%) |
| Supervisor | 1 (0.8%) | 1 (0.8%) | 2 (1.6%) |
| Lecturer | 2 (1.6%) | 18 (14.2%) | 20 (15.7%) |
| Instructor | 17 (13.4%) | 11 (8.7%) | 28 (22%) |
| District public health nurse | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Asst. professor | 1 (0.8%) | 0 (0%) | 1 (0.8%) |
| Principal | 0 (0%) | 1 (0.8%) | 1 (0.8%) |
| Total | 51 (40.2%) | 76 (59.8%) | 127 (100%) |

The tables 15 shows that, 76.8% of respondents give their opinion on DPHN post should be specialized for PHSN, & create working scope from root to central level among them 32.3% are SSN, 16.2% are ward in charge, 16.2% are instructor and 9.1 % are lecturer. Most 89.9% of

respondents expect from central authority to create working position and promotion according to merit and skill. Among them 37.4% are SSN, 17.2% are ward in charge, 19.2% are instructor and 12.1% are lecturer. Among the

respondents 41.4% expect to increase their working scope in research setting.

The table 16 shows that among the 40.9% of senior staff nurse only 15.7% have got skill

development training. Among 17.3% of ward in charge 7.1%, 1.6% of 15.7% lecturer, 13.4% of 28% of instructor also received training for skill development on their own working field.

Table 17: Scope of using MPH educational knowledge in professional field of respondents according to their type of working organization, (n=91)

| Type of working organization | Scope of using MPH educational knowledge in professional field | | | | Total |
|------------------------------|----------------------------------------------------------------|------------------|------------|----------------|------------|
| | Managerial work | Health education | Research | Administration | |
| Primary level hospital | 4 (4.4%) | 8 (8.8%) | 0 (0%) | 0 (0%) | 9 (9.9%) |
| Secondary level hospital | 4 (4.4%) | 4 (4.4%) | 0 (0%) | 1 (1.1%) | 5 (5.5%) |
| Tertiary level hospital | 23 (25.3%) | 31 (34.1%) | 1 (1.1%) | 0 (0%) | 35 (38.5%) |
| Nursing college or Institute | 27 (29.7%) | 33 (36.3%) | 12 (13.2%) | 5 (5.5%) | 42 (46.2%) |
| Total | 58 (63.7%) | 76 (83.5%) | 13 (14.3%) | 6 (6.6%) | 91 (100%) |

The table 17 number 25 shows that, maximum respondents 83.5% have given their opinion they can able to give proper health education in their working field. Among them 36.3% working in nursing educational institute, 34.1% in tertiary level hospital, 8.8% in primary level hospital. Majority 63.7% of respondents are getting scope to utilize their knowledge in managerial sector among them 29.7% from nursing college or institute, 25.3% from tertiary level hospital and 4.4% from primary and secondary level hospital. Only 13 (14.3%) of 91 respondent can get scope to use their knowledge in research setting. Among them maximum 13.2% of respondents are related to nursing education and only 6.6% of respondent used their knowledge in administrative work.

DISCUSSION

The study shows that most of the respondents were female about 81.1% and others were male about 18.9% out of 127 respondents. This represents the closest ratio of male and female in nursing profession of Bangladesh because at the time of admission in diploma or BSc in nursing out of every 100 students, 90 females and 10 males are admitted (Diploma in Nursing admission, 2020-21).

Among these 127 respondents we also found 116 (91.3%) of respondents were married and other 11 (8.7%) of respondents were unmarried at the time

of study. Similar observation was made by Morsheda et al. (2016).

Out of 127 (100%) respondents all had completed MPH degree from NIPSOM and among them 10 (7.90%) out of 127 had also completed MSN (Masters of Science in Nursing) and only 3.10% of respondents had completed their PhD degree.

Among them maximum number of respondents 45 (35.4%) have completed their MPH in HP & HE (Health Promotion and Health Education) and the minimum number 1 (0.8%) in OEH (Occupational and Environmental Health). On the other subjects 29.1% from Hospital Management (HM), 16.5% from Health Service Policy and Management (HSMP), 14.2% from Reproductive and Child Health (RCH) and 3.9% from Community Nutrition (CN) of respondents had completed their MPH. Note that NIPSOM offers MPH in eight subjects as Community Medicine, Community Nutrition, Epidemiology, Hospital Management, Health Promotion & Health Education, Health Service Management & Policy, Occupational and Environmental Health, Reproductive & Child Health. Initially nurses had the opportunity to do MPH in only one subject that was HP & HE, later they were given the opportunity to study in six subjects and now they are able to do their masters course in four subjects these are Community Nutrition, Hospital Management, Health

Promotion & Health Education and Health Service Management & Policy (NIPSOM, 2021).

The study revealed that maximum respondents (70.90%) had chosen MPH degree because they thought NIPSOM was best educational institute with many others reasons but among them 16.6% of respondents choose MPH only for NIPSOM is best. About 52% of respondents were interested to develop career in public health with other mixed reasons and 25.7% of them had this only reason for choosing MPH. The minimum number of multiple responses 7.90% of respondents just want to acquire a post-graduation degree, subject or division didn't matter to them. The number 39.40% of respondent gave their opinion that they had no opportunity of other post-graduation degree without MPH in the country and among 12% of them had chosen only that reason. Among the respondents 33.90% had graduation on Public Health in Nursing so they choose MPH. Before the establishment of National Institute of Advanced Nursing Education and Research (NIANER) there was no opportunity to acquire post-graduation degree in the country for nurses from the government organization. NIANER have started its academic journey from 2018, before that NIPSOM only was reliable government post-graduation educational institute for nurses in country. MSN courses are currently taken initiative to launch by many governments and non-government organizations which will extend the way of higher education of nurses.

The study shows that most 58.30% of the respondents had aimed to involve in teaching with other options but 41.89% of them had only aimed to be nursing teacher. About 55.10% of respondents had aimed to be more confident and effective in their work field with many other expectations but 35.71% of them singly to be confident and effective in their work field. Minimum 38.60% out of 100% multiple response and 26.53% out of 38.60% of single response had expectation to promote in management or administration.

The maximum number 99 (78%) of respondents expressed their opinion as they had no scope of utilizations as public health specialist nurse in government health care service, on the other hand

28 (22%) of respondents gave their opinion that they had proper utilization in government health care service of Bangladesh.

Among these 78% who thought they had no scope of utilization as PHN in Government Health Sector most of them were senior staff nurse 33.3%. 13.4% of 17.3% of ward in charge have expressed the same things. 1.6% of supervisor, 0.8% of Asst. professor, Principal gives the same opinion that they also have no opportunity to utilization as PHN in government health sector. 11% of lecturer and 17.3% of instructor also agreed with that opinion.

If we look at the SDGs the 3rd goal is fully covered by public health. The targets under 3rd goal involved reducing MMR, preventing newborn and under 5 children mortality, strengthening the prevention and treatment of substance abuse, ending the epidemics, reducing premature mortality from non-communicable diseases, reducing the death from RTA, ensuring universal access to sexual and reproductive health-care, achieving universal health coverage, reducing deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination, supporting the research and development of vaccines and medicines, increase health financing and strengthening the capacity for early warning and risk reduction. Each and every target has clear scope to utilize public health nurses. In many countries public health nurses are working in counseling, school health, occupational health, infection control team, health policy development and decision making, non-communicable disease control, research etc. In our country in the government health sector there is no scope of that type of activities for nurses. Despite their wishes the PHSN can not able to engage in such type of activities only for there is on defined position or post for nurses in our health service.

Among the 100 out of 127 respondents those who thought that they had no scope of utilization as public health specialist nurse in government health care service the study finds out their expectations from central authority. Most of the respondents 90 (89.9%) want working position and promotion according to their merit and skill. Among them 16 (12.59%) of respondent's responded singly for

this. About 76.8% of them want specialization of District Public Health Nurse (DPHN) post like they want working scope as public health nurse from root to central level of the country and the post will be reserved for the public health specialist nurse (MPH holder nurses) and 41 (32.23%) of respondents expect more scope to work in research setting. In our government health sector, there are so many activities directly related to public health but that areas there is no or less exposure of nurses, like immunization, reproductive health care and family planning service, IMCI, communicable and non-communicable disease prevention, public health research etc.

It was also found that, 76.8% of respondents gave their opinion on DPHN post should be specialized for PHSN, & create working scope from root to central level. Among them 32.3% were Senior Staff Nurse (SSN), 16.2% were ward in charge, 16.2% were instructor, 2% were supervisor and 9.1% were lecturer. 89.9% of respondents expect from central authority to create working position and promotion according to merit and skill among them 37.4% were SSN, 17.2% were ward in charge, 19.2% were instructor and 12.1% were lecturer. The 41.4% of respondents those who expected to increase their working scope in research setting among them maximum 21.2% were SSN and minimum 1% was Asst. Professor. An MPH is a degree that focuses intensely on the concept of public health practice. With a master's degree in public health, it makes eligible for all sorts of job possibilities in the area of public health for example, research, working with people with community health problems, and also in government agency concerned with public health. This degree is also focused on teaching.

The study revealed that most of the respondents (68.5%) were living in urban area, 23.6% in peri urban area and few of the respondents 7.9% were living in rural area. Maximum (44.9%) of respondents work in tertiary level hospital, 39.4% in Nursing college or institute, 7.1% in primary level hospital, 6.3% in secondary level hospital only 2.4% of respondents works in administrative level.

According to working unit it was founded that most of the respondents (58.3%) were working in hospital, followed by 39.4% of respondents were working in educational institute and only 3 (2.4%) of them were working in administrative position.

The study shows that maximum number 52 (40.9%) of the respondents were working as senior staff nurse, only 1 (0.8%) was working as DPHN, Asst. professor and Principal, and 20 (15.7%) as Lecturer, 28 (22%) of respondent were working as Instructor. Among them 22 (17.3%) were ward in charge and 2 (1.6%) were serving their responsibilities as supervisor.

Nursing service of Bangladesh is mainly clinical nursing-oriented service. There are very few opportunities for nurses to work in public health. In the whole nursing sector only have 64 posts for PHN called DPHN among government health service. In these 64 posts 23 are vacant though some nursing staffs are acting as in-charge in 23 posts. These DPHNs perform administrative duties more than public health. This is very disappointing for PHSN.

Most of the respondents (78%) were interested to work in teaching with other options but among them 29.29% are interested only in teaching. Followed by 32.30% showed interest for administration and 33.10% for research. About 14.20% of respondents showed interest for general nursing with other multiple response among them only 3 (16.6%) had shown interest for clinical nursing.

According to recruitment rules of government nursing service, entry post is Senior Staff Nurse (SSN) that is considered as 2nd class 10th grade level and requirement is diploma or B.Sc. in Nursing with nursing registration. Next level is supervisor in also 10th grade position main requirement for this post is seniority. Then 9th grade post is lecturer considered as 1st class post and requirement for this post are 5 years working experiences as SSN or DPHN and have MPH or MSN degree from recognized university. For being DPHN the requirements are 5 years working experiences as supervisor, in-charge, instructor, demonstrator, SSN and DPNH and also have B.Sc. nursing degree in public health but in case of

recruitment prioritize seniority. Besides there are so many posts under various grads in this nursing service. It can be found by analyzing these posts that joining as lecturer is easier and considered as dignified than SSN after taking MPH degree. So, most of the nurses after completing their post-graduation want to be teacher.

Maximum number 33.1% of respondents had 1-3 years working experiences, followed by 23.6% had more than 3-5 years, 27.6% had more than 5-10 years and only 15.7% had more than 10 years working experiences in their present working position. Among them 40.9% of respondent were SSN and 16.5% of them had more than 5-10 years and 18.1% of them had working experiences in this same position for more than 10 years even after completion of MPH degree their position or designation has not changed.

The study shows that majority number 86 (67.7%) of respondents are not satisfied and 41, (32.3%) of respondent are satisfied in their current working position. Among those respondents were not satisfied, most of them were senior staff nurse 32.3%, among total 17.3% of ward in charge 11.8% were not satisfied, 15.7% of respondent were lecturer and among them 9.4% of them were not satisfied. Among 22.0% of instructor 11.8% are not satisfied in their present working position. 0.8% of respondent were District public health nurse, Asst. professor, Principal among them DPHN is satisfied and Asst. professor and Principal were not satisfied in their working position. For this huge number of dissatisfactions among the nursing professionals there are so many reasons. One of the most important cause is that less opportunity for getting promotion. Most of the nursing posts like instructor, lecturer, DPHN etc are filled up as acting or in charge from senior staff nurses. So whatever responsibilities they carried out their main designation remain Senior Staff Nurse that is so much burning issues for them.

About 17.3% of respondents are ward in charge 15.7% of them have 1-3 years working experience. Among the respondents 15.7% were in lecturer position and most of them 10.2% were working for more than 3-5 Years. About 22.0% of respondent were instructor among them 7.9% had experiences

for more than 5-10 Years and 0.8% of respondents are District public health nurse, Asst. professor, and Principal among them DPHN working for more than 5 – 10 Years and Asst. professor, and Principal working for 1 – 3 years in their position.

The study shows that 76 (59.8%) of the respondents didn't get any training for skill development where 51 (40.2%) of respondents had received skill development training that is essential for effective job performance. Among the 40.9% of senior staff nurse only 15.7% had skill development training. Among them 17.3% were ward in charge 7.1%, 1.6% of 15.7% lecturer, 13.4% of 28% of instructor also received training for skill development on their own working field.

Most of the respondents 93 out of 127 have said that they can use their MPH educational Knowledge in their working area, but 34 (26.8%) have said that they have no scope about it. Among these 93 of respondents 83.90% of them can give health education, 63.40% can use their knowledge in managerial work, 14% in research and 7.50% in administrative work.

This is also found that maximum respondents (83.90%) who had given their opinion they can able to give proper health education in their working field among them 35.5% working in nursing educational institute, 33.3% in tertiary level hospital, 8.6% in primary level hospital. The 63.4% of respondents are getting scope to practice their knowledge in managerial sector among them 29% from nursing college or institute, 24.7% from tertiary level hospital and 4.4% from primary and secondary level hospital. About 13 (14.3%) of 91 respondent had scope to use their knowledge in research setting. Among them maximum 13.2% of respondents were related to nursing education. Only 6.6% of respondents were using their knowledge in administrative work.

The results of this study show that how beneficial this post-graduation is in their professional field. 38.6% of respondents expected to be promoted in managerial or administrative position during their MPH education but among them 16.5% of respondents had no change in position, they are working as SSN, 7.1% as ward in charge, 5.5% as Lecturer and 8.7% as Instructor. The 58.3% of

respondents had expectation to involve themselves in teaching. Among them 26.8% had no change in their working position, 11% as ward in charge, 8.7% as lecturer, 9.4% as instructor and 0.8% as principal and asst. professor were working. About 55.1% of respondents wanted to make themselves more effective and confident in their working area. It is founded that the professional status 40.9% of the respondents have not changed on the other hand 59.1% out of 100% of respondents have changed somehow their professional status.

CONCLUSION

Health is one of the basic rights of human. Each and every people have right to get health care facilities from each corner of the community or the country and by the public health services it can be made possible to reach everyone. As more growing and challenging services public health sector have so many areas for nursing contribution. In this study maximum respondents were female because only few males are getting chance for nursing education and everyone had completed their MPH degree from NIPSOM. Among these respondents' maximum choose MPH as considering NIPSOM is best government public health educational institute and their motive while studying was professional improvement. Most of the participants agreed that they had no scope to utilize as public health specialist nurse in government health service and they expected more working opportunity to work in public health sector from upazila to central level. Many of the respondents were working as Senior Staff Nurse (SSN), after completing higher education their professional condition or position had not changed. This was the very important reason for majority number of dissatisfactions among the participants in this study.

Recommendations

For bringing the optimal success in public health there needed to be increased the exposure of Public Health Specialist Nurses (PHSNs) in various activities like health policy development

and management, health education and disease prevention both communicable and non-communicable etc. It is needed to be created post for PHSNs from central to root level that they can contribute more to beneficial public health. More training facilities for should be arranged for PHSNs on their own professional field so they can be more efficient, skillful and productive in their own working area. NIPSOM is a renowned public health educational institute in Bangladesh. At present nurses has scope to study in four subjects among eight. More scope should be opened in all subjects rather limited subjects. Scopes in utilizing PHSNs in research, training and consultancy should be encouraged.

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