



HEALTH STATUS OF FIELD LEVEL FEMALE HEALTH PERSONNEL: STUDY IN A RURAL AREA OF WEST BENGAL

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ABSTRACT

Introduction: Health personnel are the backbone of health care delivery system. Their work is stressful. Yet no attention is paid to their health. With this background a study was conducted to assess the health status of female health workers of Singur Block West Bengal.

Materials and Methods: This cross-sectional study was performed in 78 female health personnel working at community level, selected by complete enumeration method. The study period was 3 months (June to August, 2017). Data was collected with a questionnaire on demographic and behavioral characteristics, SF-12 questionnaire for general health, PSS-4 questionnaire for stress with anthropometric measurement and blood sugar examination. Descriptive statistics were presented and Chi-square Test was performed to analyze the data by using SPSS 16 version.

Results: Of the 78 subjects 40(51.3%) personnel were with poor health and 31(64.6%) of them were stressed. Poor health was associated increased age, stress and abnormal duration of sleep which was statistically significant.

Conclusion: Majority of the female health personnel had poor health. Periodic health check up is a must for maintenance of their good health.

KEYWORDS : Health status, poor health, health personnel, stress

Introduction :-

Female health workers are the backbone of health care delivery system at grass root level. They are the indispensable component of the health workforce. It is to be pointed out the link between the adverse factors in the working environment with their physical and psychological health. They had the witness of many tragic events of life, disease, trauma which are stressful. Occupational stress affect individual's health along with mental health. Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease by World Health Organisation. In all society, health is considered as a primary humanity need. [1] Work plays a vital role in the lives of most people. It is not only the means of earning a living and of maintaining self esteem but also a source of constant strain and stress. [2] Working women have multiple roles to play in the community as a daughter, a wife, a mother, a housewife and an employee. They have dual role to perform at home and at work place. Female health personnel in the community play the central role ensuring the appropriate management of the health system: logistics and facility management to finances and health care interventions. [3] WHO states that right workers with the right skills in right place to do the right things. [4] To provide effective health care services, health status of the service providers should be assessed. Under NHM, the government aims to increase the availability and accessibility of health care delivery to rural area and for this good health of care providers is to be ensured to achieve universal health coverage.

Working women have multiple roles to play as a mother, a housewife and an employee. Being subject to dual demands of home and workplace they are liable to face a crisis of adjustments which may cause strain and stress. [5] Keeping this idea in mind this study was conducted to assess general health status of female health personnel and associated factors so that preventive measures can be carried out for appropriate health care delivery.

The current study aimed to determine the general health and to identify

the factors affecting their health status among female health workers at community level in Singur, West Bengal.

Materials and Methods:-

This was a cross-sectional facility based observational study conducted in all sub-centres under RHU&TC, Singur which is the rural field practice area of AIHH&PH, Kolkata.

The study was performed on female health workers working at community level from April to June 2017. 78-subjects were determined for the current study and they were Public Health Nurse(PHN), Health Worker(Female) {HA(F)}, Accredited Social Health Activist(ASHA). Sampling was carried out by complete enumeration method. Pretesting was carried out among 10 HW(F) of another rural area in Singur Block served by Department of Health and Family Welfare, West Bengal. The study technique was face to face interview, anthropometric measurement, clinical and blood examination. The study data was gathered using pre-designed and pre-tested structured schedule on socio demographic information including age, religion, caste, educational qualification, designation, duration of service, marital status, members and type of family, total monthly income of the family, general health status assessed by modified and adopted SF-12 questionnaire (Median attained score of general health was 4, ranging from 0 to 14, more than equal to 4 considered as poor health and less than 4 as good health) and stress by PSS-4 questionnaire (the median score of perceived stress was 1, ranging from 0 to 4), duration of sleep at night (6 – 8 hours as normal, less than 6 hours and more than 8 hours as abnormal), physical activity (Walking or cycling more than 30 minutes per day for at least 5 days per week), diet (24 hours recall),

co-morbidities, portable analogue Weighing Machine and non – stretchable measuring tape to measure height and weight to calculate BMI, sphygmomanometer for Blood pressure, glucometer with strip for Random Blood Sugar estimation.

Operational definition :

i) JNC 7 Classification of Hypertension

- Pre hypertension - SBP(120-139 mmHg) or DBP(80-89 mmHg)
- Hypertension Stage I - SBP(140-159 mmHg) or DBP(90-99 mmHg)
- Hypertension Stage II – SBP(=>160 mm Hg) or DBP(=>100 mm Hg)

ii) NFHS-4 Blood Sugar level among adults (15-49 years of women)

- High (>140 mg/dl)
- Very High (>160mg/dl)

Statistical Analysis

Data were analysed using SPSS statistical software programme (version16). Chi-square Test was performed to establish association between variables.

Ethical Issue

The study was approved by Institutional Ethics Committee. Biomedical Waste Management procedure was maintained.

Results

Of the 78 subjects 51.3%(40) personnel were with poor health. The mean age of female health personnel was found to be the mean age of 42.09 year with a range between 32 years to 51 years. Majority of study subjects were 74 (94.87%) were Hindu and 4(5.12%) were Muslim. Among them 80.76% (63) belonged to other caste, 10.25%(8) to SC and 8.97%(7) to OBC. Majority of female had studied up to graduation 33(42.3%). In respect to designation in service PHN(S)1.2%(1), PHN5.1%(4), HW(F)24.3%(19), ASHA 69.4%(54). Majority (73.1%) of them were working of an average for 5.6 years duration. 65.45% (51) belonged to nuclear and rest were from joint family. All of them were married except one who was widow. According to Modified BG Prasad Scale (2016) 32.05% (24) belonged to upper, followed by 37.17% (30) to upper middle, 25.64% (20) and lower middle class 5.1%(4).

Among all of them having poor health 64.4% were with perceived stress and 68.1% of people with stress were having poor health. They did not have any history of addiction. All of them used to have mixed diet. Among them 70.1% (65) were with abnormal BMI and 73.1% were with poor health. 93.58% had the habit of performing physical activities.

According to JNC-7 classification 11.5%(9) had pre hypertension. As per NFHS-4 guideline 3.84%(3) with high and 5.12%(4) with very high random blood sugar level. Among them 20.51% were having comorbidities with multiple response. 7.6%(6) had hypertension, 0.01%(1) with diabetes mellitus, 0.01% with ischaemic heart disease, 4.28%(3) chronic obstructive pulmonary disease, 0.01%(1) with acid peptic disorder, 7.14%(5) with hypothyroidism, 0.01(1) bleeding per rectum, 0.01%(1) fatty liver, 2.5%(2) with polycystic ovarian syndrome.

Table 1: Factors Associated with Poor Health of Study Participants (n = 78)

Variables	Poor Health (No%)	chi-square value	p value
1.Age (in yrs.)			
42 - 51	24 (66.7)	9.91	0.002
32 – 41	13 (31.0)		
2.PSS Score			
Stress	31(64.6)	8.83	0.003
No stress	9 (30.0)		
3.Duration of sleep at night			
Abnormal	9(76.6)	8.99	0.003
Normal	21(39.6)		

In the current study participants with poor general health was about 51.3%. Majority of poor health was in the age group 42 to 51 years about 66.7%. Poor health was associated increased age, stress and abnormal duration of sleep which was statistically significant.

Discussion

Female health personnel in community are major workforce at grass root level. In the health care delivery system, female health personnel play a major role in promotive and preventive as well as to some extent in curative services in the community still their health status

assessment has not been drawn much attention. To our best knowledge no literature has been found on health status of female health personnel at community level. Some related studies were there. In a study conducted by Haseli N et al in Iran among nurses in educational hospital, 57.9% had poor health assessed by GHQ-28 questionnaire which was similar to the current study, 51.3% had poor health detected by SF12 questionnaire.[6]

Conclusions

Majority of the female health personnel had poor health status. Age and stress were significantly associated with poor health. Periodic health check up is a must so that appropriate preventive and curative measures may be taken for maintenance of their good health. Counselling for stress reduction is to be established to cope up their stressful lifestyle. The development of an effective policy encouraging the health professional's participation in decision making may reduce their stress. This will increase the general effectiveness of the health system and improvement of care providers and service users. Some stressors in this occupation are inevitable and for this managers of health are supposed to take action in order to improve the working environment conditions. As there was no relation of poor health status with socio-demographic factors except age and other behavioural characteristics further study is suggested to explore relationship.

References:

1. Lee A, Kiyu A, Milman HM, Jimenez J. Improving health and building human capital through an effective primary care system. *J Urban Health*. 2007; 84(3):75-85.
2. Kaila HL. Occupational Health of Women in India: A review. *Indian Journal of Occupational Health*. 1996; 1: 1-3
3. Health workforce in India : assessment of availability, production and distribution : WHO South East Asia Journal of Public Health 2013 : April-June :2 (2) : 106
4. Andrade C, Postma K, Abraham K. Influence of women's work status on the wellbeing of Indian couples *International Journal of sociology and psychiatry*. 1999; 45(1): 65-75.
5. WHO. The WORLD Health Report 2006: Working together for health. 2006. Geneva: World Health Organisation
6. Haseli N, Ghahramani L, Nazari M; Genaral Health Status and Its Related Factors in the Nurses Working in the Educational Hospitals of Shiraz University of Medical Sciences, Shiraz, Iran, 2011; *Nurs Midwifery Stud*. 2013 :2 (1); 146 - 151 ena