

SERVICE DELIVERY OF PUBLIC HEALTH MIDWIVES; AN EXPERIENCE FROM RURAL SETTING, SRI LANKA

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ABSTRACT

Public Health Midwives play a major role to maintain a sustainable and successful health care service in the country. In detail analysis of their performances is a timely need. A descriptive cross-sectional study associated with a qualitative component was conducted among 264 Public Health Midwives in Nuwara Eliya district. By using a validated self-administered questionnaire task performance, contextual work performance and counterproductive work behaviour of Public Health Midwives were analyzed. A Focus Group Discussion was held with all the MOHs of the district and three Key Informant Interviews were conducted with the district supervising officers. Scoring mean for the individual task performance was 3.87 (SD=0.79) and for contextual performance it was 3.54 (SD=0.78). Mean value of the counter productive work behaviour was 2.67 (SD=0.76). Numerically a large number of participants have shown an excellent task performance (N=124:47.0%). Anyhow it does not represent the majority (<50%). Percentage of participants with an unsatisfactory task performance were 2.6% (N=7). Approximately one third of the study sample showed a good task performance. Numerically a larger number of study participants (N=118:44.9%) have shown a good contextual performance. Number of study participants who have shown a satisfactory contextual performance (N=65:24.7%) is nearly equal to the number of participants who have shown an excellent contextual performance (N=73:27.4%). Majority of the participants do not have the habit of talking to people outside the organization about the negative aspects of their work. Most of the participants were used not to focus on the negative aspects of situation at work instead of the positive aspects. Motivational strategies should be applied to achieve maximum performances with minimum resources. A comprehensive tool which can be used for PHM and other categories of health staff supervisions and assessments should be developed. It can be used for independent supervisions and work assessments. Individual work performances were observed to be raised with increased age and service duration. System strengthening and taking flexible administrative decisions should be considered for each PHM area.

Key words: Midwife, Nuwara Eliya, Performance

INTRODUCTION

History of providing organized maternal and child health care facilities in Sri Lanka spreads over a period of hundred years (Fernando, Jayatilleka and Karunaratna, 2003). Maternal and child health care policy practiced in Sri Lanka comprises of four main components (Family Health Bureau, 2012). They include maternal health, child health, health of women and family planning (Family Health Bureau, 2012). A special attention was focused on providing primary health care services after the world health conference held at the city of Alma - Ata in the Soviet Union in 1978 (Beard and Redmond, 1979). Sri Lankan government which identified the need of a more organized and methodological domiciliary primary health care provider, decided to recruit public health care officers in a procedural manner and integrate them to the primary health care units after a formal training (Fernando, Jayatilleka and Karunaratna, 2003). Due to this, health care services became more popular with the social establishment of Public Health Midwives (De Silva, 2014). Although it is said that, to provide a satisfactory and efficient service, there should be one PHM for 2000 to 2500 people, this status is not yet achieved in Sri Lanka (Family Health Bureau, Ministry of Health, 2015).

METHODS

A descriptive cross-sectional study was conducted in all Medical Officer of Health areas in Nuwara Eliya district.

The study design consisted of two components.

Component I – Descriptive cross-sectional study design was applied to collect data from Public Health Midwives attached to the Medical officer of Health offices in Nuwara Eliya district.

Component II- Qualitative data collection was conducted by performing Key Informant Interviews with selected stake holders responsible for the work performances of study participants. These Key Informant Interviews were followed by a Focus Group Discussion with all Medical Officers of Health in Nuwara Eliya district.

Study was conducted for a period of ten months from October 2017 to July 2018. In Nuwara Eliya district; Sri Lanka.

All Public Health Midwives of Medical Officer of Health areas in Nuwara Eliya district were considered as study population and Public Health Midwives attached to demarcated midwife areas in Nuwara Eliya administrative district were included. Taken leave for more than one month during last one year at the time of commencement of the study were excluded. This was a validated structured questionnaire which included both closed and open ended questions. These questions were used to collect sociodemographic data with relevance to the PHMs and data regarding self and individual work assessment. This self-administered

questionnaire consisted of three main sections. Part A and B consisted of open and close ended questions. Statements prepared according to the “likert scale” were included into part C. These statements are arranged in below mentioned sub components

Three Key Informant Interviews were conducted by the principal investigator with selected stake holders in Nuwara Eliya district. They were

- Regional Director of Health Services
- Medical Officer (MCH)
- Regional Supervising Public Health Nursing Officer

For Key Informant Interviews convenient dates and times were obtained from relevant participants and Key Informant Interviews were conducted at the RDHS office, Nuwara Eliya on the scheduled venue. These interviews were conducted with the interviewee and the principal investigator only and during these interviews privacy and confidentiality were maintained. Informed consent was obtained from the participant before commencing the study. All the data collected during the interview were documented in detail by the principal investigator.

Focus Group Discussion was conducted at the RDHS office, Nuwara Eliya. A date which all the MOH officers were participating a meeting at the RDHS office was used for the Focus Group Discussion. This Focus Group Discussion was conducted by the principal investigator just after the meeting is concluded. Facts elicited during the discussion were documented by the research assistants.

To conduct this Focus Group Discussion and other Key Informant Interviews, pre prepared guidelines with semi structured questions were used (Annexure V, VI, VII, VIII). Before commencing the Focus Group Discussion informed consent was obtained from all the participants for participating in the study. MOH or AMOH from all the MOH areas in Nuwara Eliya district participated in the Focus Group Discussion. All interviews were recorded and reviewed with identified and structured coding system. A Focus Group Discussion was conducted with all the Medical Officers of Health working in Nuwara Eliya district.

RESULTS

According to the individual work performance scale, duty performances of the study participants were assessed in three main categories. They are task performance, contextual work performance and counterproductive work behaviour.

Table 1: Distribution of individual performance score among midwives

| Performance type | Mean | SD |
|-----------------------------------|------|------|
| Task Performance | 3.87 | 0.79 |
| Contextual Performance | 3.54 | 0.78 |
| Counter productive work behaviour | 2.67 | 0.76 |

Scoring mean for the individual task performance was 3.87 (SD=0.79) and for contextual performance it was 3.54 (SD=0.78). Mean value of the counter productive work behaviour was 2.67 (SD=0.76).

Table 2: Pattern of distribution of responses on task performance perceived

| Statement | Seldom | Sometimes | Regularly | Often | Always |
|---|--------|-----------|-----------|-----------|-----------|
| I was able to plan my work so that I finished it on time. | 5(1.9) | 35(13.3) | 44(16.7) | 93(35.1) | 87(33.0) |
| I kept in mind the work result I needed to achieve. | 3(1.1) | 22(8.5) | 39(14.8) | 103(38.9) | 97(36.7) |
| I was able to set priorities. | 4(1.6) | 49(18.6) | 31(11.8) | 79(29.9) | 101(38.1) |
| I was able to carry out my work efficiently. | 1(0.4) | 46(17.5) | 39(14.7) | 92(34.8) | 86(32.6) |
| I managed my time well. | 6(2.3) | 35(13.3) | 40(15.3) | 104(39.3) | 79(29.8) |

Majority perceived to plan their work often or always so that they finished the particular work on time. Majority of the participants was keeping in mind the work result they needed to achieve. Numerically a large number of participants have shown an excellent task performance (N=124:47.0%). Anyhow it does not represent the majority (<50%). Percentage of participants with an unsatisfactory task performance were 2.6% (N=7). Approximately one third of the study sample showed a good task performance.

On their own initiative, minimum number of participants started new tasks when their old tasks were not completed. Majority of the participants have a habit of updating their job related knowledge and skills. Majority of them are ready to accept challenges when they face them. Most of the participants showed some reluctance to take extra responsibilities. Majority of them were actively participating in meetings and other consultations.

Table 3: Pattern of distribution of responses on contextual performance

| Statement | Seldom | Sometimes | Regularly | Often | Always |
|--|----------|-----------|-----------|-----------|----------|
| I started new tasks when my old tasks were completed. | 12(4.5) | 64(24.2) | 57(21.5) | 60(22.6) | 71(26.8) |
| I took on challenging tasks when they were available. | 7(2.6) | 52(19.7) | 30(11.5) | 85(32.2) | 90(34.0) |
| I worked on keeping my job-related knowledge up-to-date. | 4(1.6) | 42(15.9) | 27(10.3) | 109(41.3) | 82(30.9) |
| I worked on keeping my work Skills up to date. | 9(3.5) | 47(17.8) | 30(11.4) | 103(38.9) | 75(28.4) |
| I came up with creative solutions for new problems. | 26(9.9) | 98(37.0) | 33(12.6) | 66(24.9) | 41(15.6) |
| I took on extra responsibilities. | 27(10.3) | 94(35.6) | 26(9.8) | 59(22.4) | 58(21.9) |
| I continually sought new challenges in my work. | 27(10.3) | 94(35.6) | 26(9.8) | 59(22.4) | 58(21.9) |
| I actively participated in meetings and/or consultation. | 17(6.1) | 56(22.1) | 30(11.4) | 130(38.9) | 57(21.5) |

Among them 3% of the study participants have shown an unsatisfactory level in the contextual performances. Numerically a larger number of study participants (N=118:44.9%) have shown a good contextual performance. Number of study participants who have shown a satisfactory contextual performance (N=65:24.7%) is nearly equal to the number of participants who have shown an excellent contextual performance (N=73:27.4%). Majority of the participants do not have the habit of talking to people outside the organization about the negative aspects of their work. Anyhow they were talking with their colleagues when necessary. Most of the participants were used not to focus on the negative aspects of situation at work instead of the positive aspects. Complaining of minor work related matters were relatively less. Anyhow study participants were making problems at work bigger than they were.

Table 4: Distribution of responses on counterproductive work behaviours among participants

| Statement | Seldom | Sometimes | Regularly | Often | Always |
|---|-----------|-----------|-----------|----------|----------|
| I complained about minor work-related issues at work. | 81(30.7) | 97(36.7) | 47(17.8) | 12(4.6) | 27(10.2) |
| I made problems at work bigger than they were. | 56(21.3) | 71(26.9) | 69(26.0) | 40(15.4) | 27(10.2) |
| I focused on the negative aspects of situation at work instead of the positive aspects. | 141(53.3) | 62(23.5) | 38(14.5) | 7(2.7) | 16(6.0) |
| I talked to colleagues about the negative aspects of my work. | 69(26.1) | 74(27.9) | 77(29.2) | 20(7.6) | 24(9.2) |
| I talked to people outside the organization about the negative aspects of my work. | 209(78.9) | 20(7.7) | 21(7.9) | 8(3.1) | 6(2.4) |

Among them 7.2% of the study participants have shown a satisfactory level in working against counterproductive work behaviours. Majority of the study participants do not integrate with counterproductive work behaviours. Performances of Public Health Midwives described in previous sections were compared with the sociodemographic and duty related variables. Continuous variables were correlated with possible ratio scale parameters. Categorical exposure variables were analyzed by using Odds ratio. Coverage data was compared by using measures of central tendency.

Presence of adequate office facilities significantly associate with an excellent level task performance. Being a resident at ones' own PHM area, having a population less than 3000 people and working in the government sector positively influenced in achieving an excellent task performance. Having quarters facilities, provided with a scooter, possessing computer skills and additional qualifications and being supervised at inspections showed a negative effect towards an excellent task performance. Study results depict how performing a cover up duty positively affects an excellent task performance.

Midwife task performances and counterproductive work behaviours positively correlated with their age. Contextual performances of the study participants showed a negative association with their age. However, any of these parameter pairs did not significantly associate with each other. Counterproductive work behaviour and task performances positively associated with their service duration, but contextual performances showed a negative association with their service duration. Any of the work performance parameters did not significantly associate with the service duration of the study participants.

Performing a cover up duty, possessing computer skills and higher educational qualifications have significantly affected their contextual performances. Being a resident in the working PHM area, presence of adequate office facilities and having an appointed population less than 3000 positively affected their contextual performances but did not show any significant association. Having quarters facilities, provided with a scooter, working in the government sector and being supervised at inspections have showed a negative effect towards contextual work performances. Being a resident at the working area, being provided with a scooter, possessing additional higher educational qualifications, presence of adequate office facilities, having an appointed population less than 3000 people and working in the government sector have positive contribution to work against counter productive work behaviours. Performing cover up duties, having quarters facilities, possessing computer skills, being supervised at inspections have negatively affected while working with the counterproductive work behaviours. However, none of the variables have significantly affected the counterproductive work behaviours.

DISCUSSION

Study findings illustrate that the geographical and sociodemographic challenges specific to Nuwara Eliya district generate a direct effect on the satisfactory performances of the public health midwives. Therefore, when applying the study findings, it is essential to pay distinct attention on each contributing factor. Study findings clearly illustrate that it is possible to increase the performances of PHMs by increasing the availability of PHMs within their PHM area (Table 27,28,29,30). To achieve this, it is mandatory to provide guidance and facilities to PHMs to locate and maintain the quarters in an orderly and well-planned manner. Study findings also demonstrate that it is possible to enhance the availability of PHMs and to improve the accessibility of PHMs to the clients by providing a scooter to all the PHMs and arranging travelling allowances whenever essential. This idea raised from the Key Informant Interviews and the Focus Group Discussion. On the other hand, it was demonstrated that a good service is provided when adequate office facilities are available. Therefore, it is appropriate to pay more attention on developing the infrastructure of offices and quarters of PHMs (Table 29,30). It is a need to assess and arrange strategies to deliver financial

allocation to provide scooters to all the PHMs and to grant travelling allowances when needed. By this, it is possible to overcome the inconveniences of unavailability and inaccessibility due to geographical challenges up to a certain level.

Globally accepted facts affecting the performances include updating the work-related knowledge and developing skills. Anyhow skills and knowledge have not affected in excellent performances of all the variables used in this study. Therefore, considerable attention should be paid when developing training programmes for PHMs. A significant amount of financial allocation is granted for capacity building in a district level health unit. These financial resources should be effectively used and properly structured training programmes should be arranged on requirement basis. This concept could be attributed on supervisions as well. A significantly higher child care coverage was noted among the PHMs who had under gone regular supervisions and the difference observed in maternal care services is insignificant.

Present study findings also emphasize the need of conducting supervisions more productively and efficiently. Individual work performance in this study demonstrate that supervisions do not enhance the PHM performance. The official supervisory staff should be trained for motivational supervisions. Study findings predict that allocation of resources for this purpose is an identified need which could be profitable. Maternal and child care coverage of study participants with computer skills and additional educational qualifications appeared less. This condition is demonstrated at the task performances of individual work performance assessment as well. Anyhow this condition was not demonstrated when maternal care services coverage was considered. That is performances related to child care is increased when the availability and accessibility is high. Anyhow when the individual work performance parameters are considered, having quarters or scooters and residing in the own PHM area do not always appear as positive factors in the study.

Having to perform cover up duties in another field area, in addition to ones' own regularly allocated area, clearly raises the service burden of a PHM. Anyhow study findings reveal that performing additional covering up duties act as a favourable factor for excellent work performances. This condition is demonstrated in both IWP scales and maternal and child care coverage. On the other hand good PHM performances are observed when the caring population is less than 3000 people which appears to be a controversial finding. During this study population number was considered but not the structure of the population or the distribution of the population. As PHM services are targeted for a specific portion of the population, it is difficult to arrive at conclusions with the findings based on the whole population. The hypothesis generated at this point should be used in future studies in a well-organized manner.

Study findings reveal that performances of government sector employees are more satisfactory than the estate sector PHMs. Specially, maternal care coverage of government sector PHMs appeared significantly high. Relatively less difference was observed during child care coverage. According to the IWP scale, government sector PHMs were more successful during task performances and counter productive work behaviours. This also reveals that for the work performances of a PHM a significant effect is created by the characteristics of the service recipient. Government sector PHMs were identified to be significantly weak only regarding the contextual work performances. Therefore government midwives show a relatively reluctant motivation towards self-organization of themselves. This issue should be strictly addressed during administrative activities.

CONCLUSIONS

To achieve excellent performances, availability and accessibility of PHM s should be increased. To achieve this goal system strengthening and taking flexible administrative decisions should be considered which has to be most appropriate for each PHM area. To gain more satisfactory performances supervisions, periodical reviews and capacity building activities should be improved. More than the number of these events, quality of these events should be upgraded. Each intervention should be evaluated by independent feedback. The interrelationship between individual work performances and maternal and child health care services should be studied in detail. Motivational strategies should be applied to achieve maximum performances with minimum resources. A comprehensive tool which can be used for PHM and other categories of health staff supervisions and assessments should be developed. It can be used for independent supervisions and work assessments.

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