EVALUATING SUPERVISORY RELATIONSHIPS BETWEEN PUBLIC HEALTH MIDWIVES: A STUDY ON MATERNAL AND CHILD HEALTH IN MATARA DISTRICT, SRI LANKA

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Abstract

Keywords:
supervision, supervisors, supervisees, interaction, Supervising Public Health Midwives.

Background

The supervisor-supervisee interaction is an important component of supervision. Regular facilitative supervision ensures service providers follow correct guidelines, continuously seek to improve their performance, overcome operational barriers and maintain motivation of supervisees

Objective

To measure the quality of interaction between the Supervising Public Health Midwife (SPHM) and the Public Health Midwife (PHM) during supervision.

Methods

This was a cross-sectional study, using triangulation of data obtained from structured observations and audio tape records of supervisor-supervisee interactions and written records of all supervision activities. Twenty four SPHM participated in the study. This study was undertaken in the district of Matara.

Results

Supervisors spent less time on supervising client care issues than on supervising facility level issues and interacting with clients. The weakest skills among the SPHMs were 'seeking client input' and 'discussing the next visit' and the strongest skills were 'giving feedback', 'discussing/interpreting data' and 'developing rapport'. Skills of supervision increased with the service duration of the SPHM but none were able to achieve the cut-off mark for satisfactory overall quality of interaction.

Conclusions

This study indicated that the overall quality of interaction between the SPHM and the PHM during supervision was poor. SPHMs lacked skills in prioritisation of supervision activities and time management. They also lacked other necessary skills that ensure a higher quality of SPHM-PHM interaction.

Introduction

Supervision is defined as 'the overall range of measures to ensure that people carry out their supervision is defined as 'the overall range of measures to ensure that people carry out their duties effectively and become more competent at work[1].This process helps to ensure quality of programme operations and enables staff to perform duties to their maximum potential[2].

Within a supervisory system, different levels of supervisors and managers guide and coordinate the work to ensure that organizational goals, objectives and standards are achieved [3].The supervisor-supervisee interaction is an important component of supervision[4].

Regular facilitative supervision ensures service providers follow correct guidelines, continuously seek to improve their performance, overcome operational barriers and maintain motivation[1].

It is expected that health service providers will offer the leadership, guidance and encouragement required for efficient supervision[1].An effective supervisor focuses on the internal and external environments of a programme. The internal environment includes programme planning, team problem solving, operations monitoring and progress towards achieving objectives whereas the external environment includes policy and guideline changes, training opportunities, communication with other levels of the health system and advocacy[5-6].To carry out supervision activities regularly and effectively and to ensure that supervision is a priority within

the larger healthcare system, managers must make sure their existing supervisory system has the appropriate level of support from the institution or the organization[6].

Studies have shown that focusing primarily on the performance of individuals is not adequate and does not ensure that the programme will accomplish its goals and objectives [7]. Between 1985 and 1990, a rural health project was conducted in the district of Salcedoin Cotopaxi province in Ecuador with the objective of strengthening supervision within the context of local planning[8].The project revealed that when the focus of supervision was on individual health workers, it acted as a barrier for the workers to participate in planning local activities, indicating that supervisors failed to motivate staff to participate in planning their local health system. When the focus was changed to supervising a local team rather than supervising individuals, participation of health workers in local health activities increased markedly.

There are several officers at central, provincial, regional and local levels of the health system, who are responsible for supervising the Maternal and Child Health/Family Planning (MCH/FP) Programme in Sri Lanka[9-11].The Medical Officer of Health (MOH), Public Health Nursing Sister (PHNS) and Supervisory Public Health Midwife (SPHM) are the officers responsible for MCH/FP Programme supervision at the local level in an MOH area[11].

According to the Family Health Bureau (FHB), which is the focal point for the MCH/FP programme in the country, each supervisor is expected to perform a certain number of supervisions per month (MOH=6; PHNS=6; SPHM=10) [11].Although the aim is an on-going facilitator supervision process, it is often overlooked. Traditional supervisory visits are based on inspection. They are mainly a fault-finding mission and subordinates often receive little guidance and are left undirected until the next supervisory visit [12]. MCH/FP supervisors often lack the technical, managerial or supervisory skills required to evaluate their subordinates[12]. Consequently, they are unable to provide adequate technical guidance to improve service delivery. Although there is much literature describing evaluation of grass-root level health workers, literature on evaluation of supervisory officers in MCH settings is limited. The objective of the study was to measure the quality of interaction between the SPHM and PHM during supervision in the MCH care setting in the Matara district.

Methods

This cross-sectional study comprised both quantitative and qualitative components and involved triangulation of methods using data from several sources. The study population comprised all SPHMs (n=24) of the Matara Regional Director of Health Services (RDHS) area. Any SPHM who was within one year of their basic training was excluded as it was considered that at least a year is needed for proper orientation to the supervisory process.
Ethical clearance for the study was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Colombo.

Non-participatory observation of the SPHM-PHM (supervisor-supervisee) interaction during supervisory sessions by the SPHM in MCH clinics was conducted. The tools used for thispurpose were an observational checklist, audio recording of the interaction and a time log. These tools were developed based on a model validated in a study done in Zimbabwe in which the study population consisted of district-level, government, municipality and Zimbabwe National Family Planning Council supervisors [13].

The team of data collectors consisted of the principal investigator (PI), a retired Health Education Officer (HEO) and a retired SPHM. Before commencing the study, the project supervisors organized a one-day training session for data collectors. The objective of this training was for the data collectors to become familiar with the supervisory skills which were being assessed and the data collection instruments and methods.
An observational checklist was used to assess skills demonstrated by the SPHM (supervisor) during the supervisor-supervisee interactions. The skills assessed were:
- Developing a rapport with the supervisee
- Discussing the recommendations of the previous supervisory visit
- Promoting provider participation
- Jointly identifying problems
- Facilitating problem solving
- Giving constructive feedback
- Education/training the supervisee

- Discussing and interpreting data
- Making suggestions and being proactive/practical
- Seeking client input
- Discussing the next visit

The checklist contained specific examples of what the SPHM would be doing or saying (both positive and negative in relation to the supervisory interaction) under each of the above skills, to reduce subjectivity and ambiguity. For instance, in observing the skill of 'discussing next visit', a positive example was 'discussing what needs to be done before the next visit' and a negative example was 'does not recapitulate what needs to be done'. During the clinic sessions the data collectors also observed specific examples of all the activities performed by a PHM (supervisee) that were under the supervision of SPHM (supervisor), and recorded them on the observational checklist. Based on these interactions, the data collectors rated the skills demonstrated by the SPHM during interactions with their supervisees on a scale of 1 - 10 (Table 2).

A digital audio recorder was used by the data collector to record discussions between supervisors and supervisees. This recorder did not obstruct the proceedings of the supervision session as it was very small in size and hardly visible.

A time log was designed to record all activities carried out by the supervisors until the end of the supervision session to quantify the time spent by the supervisor on each activity. The time log contained information on the time of onset of a particular activity and the type of activity.

Informed verbal consent to observe interactions was obtained from the supervisors (SPHMs) and supervisees (PHMs) prior to data collection. During data collection the data collectors did not record any data during the first 15 minutes of each supervision session in order to become familiar with the supervisors and to minimize the effect of observation on the interaction. The PI conducted the skills assessment of the SPHM during the interaction, based on the observational checklist and its pre-determined scoring system. The retired HEO audio-taped the discussion between the supervisor and supervisee. The retired SPHM recorded the activities taking place during the process of supervision using the time log.

SPSS software package 9.0 was used to analyze data [14].Information obtained using the time log was subsequently classified by the PI into five categories. Duration of supervision was defined as the time from start to end of the supervision session. Traveling time was not included in the duration of supervision. The initial 15 minutes, which was omitted for observation at the onset, was added to the duration of time spent on supervision.

A total of 43 hours of supervisor-supervisee interactions were audio taped and translated into English by an English teacher who was conversant in both English and Sinhala. Only a small proportion (0.6%, <15 minutes) of the tapes was unintelligible. The transcribed interactions were coded using the Nudist software package and analysed[15].

When scoring each skill using a pre-determined scale, a score of 7-10 considered 'good to excellent', 4-6 'inadequate and needs improvement' and 1-3 'poor and greatly needs improvement'. The overall quality of the SPHM-PHM interactions was assessed for each SPHM by adding the scores obtained for each skill. Since there were 11 skills, the minimum total score was 11 while the maximum was 110. The cut off point for exemplary behaviour set at 77 marks out of 110 was based on a study conducted by Tavrow et al in 1999 [13].

Results

All 24 supervisors (SPHM) assessed, were Sinhala Buddhist females. Their mean age was 42 years (SD=4.3). The median duration of a supervision visit was 128.5 minutes with a range of 31 to 257 minutes.

In describing the time spent for supervision, the supervisory activities were classified into five categories; supervising client care, monitoring facility level issues, interacting with clients, writing notes/comments and other activities (Table 1). According to Table 1, the average time spent on supervising client care and interacting with clients was less than the average time spent on supervising facility level issues. Writing notes/comments and other activities consumed a relatively greater proportion of supervision time.

Table 2 presents the results of the skills assessment of the SPHM during interactions with their supervisees. The results show that supervisory skills varied widely between supervisors. The lowest rated skills were 'seeking client input' and 'discussing the next visit'. The highest rated skills were 'giving feedback', 'discussing/interpreting data' and 'developing rapport'
(Table 2).

Table 1- Average time spent on various activities by length of supervisory visits

Activity		Shorter visits <2hrs Median time (Minutes)	Longer visits ≥2hrs Median time (Minutes)
Supervising client care	Observing clinical procedures	3	8
	Observing client-supervisee communication	0	10
	Interacting with supervisees on client care issues	2	15
	Interacting with providers of facility level issues	4	25
Supervising facility level issues	Checking registers, records and data	11	30
	Checking supplies and equipment	8	20
	Checking infrastructure	6	13
Interacting with clients	Talking to clients	6	22
	Performing clinical procedures	1	7
Writing notes and comments		0	27
Others		5	38

Table 2- Distribution of ratings for the skills demonstrated by Supervisors (SPHMs) during interactions with their supervisees (PHMs)

Skill area	Median rating (out of 10)	Range of rating (from 0-10)
Developing rapport	5.5	2-6
Discussing the previous visits	3.5	1-6
Promoting supervisee participation	2.3	1-6
Identifying problems	2.3	1-6
Problem solving	3	1-6
Giving feedback	6.3	1-6
Giving education/on the job training	5.4	2-6
Discussing/interpreting data	5.6	2-6
Making suggestions	3.1	1-6
Seeking client input	1.7	1-3

Discussing the next visit	1.9	1-3

The score obtained for the overall quality of interactions ranged from 21 to 68 (Table 3). The quality of interaction was higher with the duration of work-experience of the SPHM. The majority of SPHM (62.6%, n=15) scored less than 28 marks for overall quality of interactions and only one of SPHMs scored between 41-68.None of the SPHMs scored equal or more than 77 marks which was the cut off value in this study for satisfactory overall quality of interactions.

Table 3-Total quality scores of SPHM-PHM interactions by the duration of service

Total Quality Score (Out of 110)	Supervisors with < 10 yrs experience	Supervisors with 11-20 yrs experience	Supervisors with ≥21 yrs experience	Percentage %
21-24	9	0	0	37.5
25-28	4	2	0	25.1
24-32	0	0	3	12.5
33-36	0	2	0	8.3
37-40	0	0	3	12.5
41-68	0	0	1	4.1
>69	0	0	0	0.0
Total	13	4	7	100.0

Discussion

Even though it is useful to assess the specific behaviour of health care supervisors and their interactions with supervisees16-18 published or unpublished studies in this area are scarce except for Tavrow et al in 1999[13].

Average time spent on activities during supervision

In the present study, writing notes/comments and other activities and supervising facility level issues took a considerable amount of supervisory time when compared to the time spent on supervising client care and interacting with clients. Supervising facility level issues took the most amount of supervision time during both the shorter and the longer visits. These findings are consistent with the study done by Tavrow et al[13].This shows the lack of concern and/or inability among SPHM in time management and prioritising supervisory activities which may have affected the overall quality and output of a particular supervision session.

Providing feedback, education and making suggestions

Providing feedback emerged as the supervisors' strongest skill in the present study, rated as 6.3 on average. Education, which is a natural extension of feedback, was another relatively strong area for supervisors. It received an average rating of 5.4. These findings are consistent with the study by Tavrow et al[13]. Feedback and on-the-spot education helps to bridge gaps in the skills and knowledge of the supervisees (PHMs) leading to higher quality of care in MCH settings. Written feedback is especially useful for PHMs as they can be used for future reference. Making suggestions, which is closely associated with feedback and education, was not a very strong skill in our study, consistent with the study results of Tavrow et al [13].

Discussing/interpreting data

Supervisors provided specific information and explanations when they instructed service-providers (PHMs). Supervisors performed relatively well in discussing and interpreting data, earning an average rating of 5.6 which is consistent with the study by Tavrow et al[13]. Such training is likely to improve PHM interpretation of data in the various records/charts maintained by them and assist in prompt identification of problems. It may also help the PHM to provide the best possible solution, thereby improving the quality of MCH care.

Developing rapport and promoting supervisee participation

The component 'building a rapport with supervisees' was highly rated, receiving an average rating of 5.5 for the majority of the supervision sessions, consistent with study of Tavrow et al[13].In the present study, the

supervisors were rated as 2.3 on 'promoting supervisee participation' which is higher than the rate reported by Tavrow et al[13]. Such skills would help build supervisee confidence by enabling capture of the supervisee's perspective of the problem and create an impression in PHMs that they are part of the solution. This, in turn, vastly improves the probability of successful execution of the jointly agreed solution. As the possible solution is jointly agreed, both parties (SPHM and PHM) remain responsible for its successful execution and results.

Identifying problems and problem solving

PHMs sometimes asked questions and raised issues, but this behaviour was not routinely observed, thus limiting observation of the supervisors' 'ability to identify issues which were rated as 2.3 on average. Problem solving was one of the weakest skills among the SPHMs of the current study, rated as 3.0 on average, which is consistent with the study results of Tavrow et al[13]. Supervisors frequently tried to solve issues quickly by making unilateral recommendations, correcting a mistake or teaching the PHMs on the spot. Supervisors rarely explored the root causes of a problem, weighed alternative solutions, developed an action plan to solve a problem over the long term, prioritised problems or engaged in systematic on- the-job training. Lack of these skills may lead to delays in identifying problems and their root causes in the MCH settings and delayed, or no, solutions to problems.

Discussing the previous and next visits

Supervisors rarely referred to recommendations made during past visits, checked progress achieved, made action plans for PHMs to implement or mentioned that they planned to review progress in future visits. Discussion of previous or next supervisory visits received some of the lowest ratings, consistent with the study results of Tavrow et al[13].This indicates that the majority of SPHM consider supervision as a one time, stand-alone event and not as a continuing cycle[19].This may have a significant impact on continuous quality improvement in the services of the PHM, especially for the PHMs who experience difficulties with their work. It also highlighted a lack of coordination between different categories of supervisors of PHMs. Such weaknesses could be minimized by improving other related skills such as giving feedback, time management and identifying and solving problems.

Seeking client input

As shown previously by Tavrow et al[13]. this was the weakest skill demonstrated by the SPHM of the current study and demonstrates a missed opportunity for evaluating the services provided by the PHMs from the client's perspective. This may indicate a negative attitude of SPHMs towards MCH clients rather than the lack of prioritization and time management.

Total quality of SPHM-PHM interactions

In the current study, the total quality of the SPHM-PHM interactions increased with the work experience of the supervisors. But none of the supervisors scored equal or more than 77 marks, the cut-off value for the satisfactory quality of interactions. This could be a reflection of the inadequacy of time allocated for teaching facilitative supervision in the current basic training courses for SPHM in Sri Lanka and the lack of continuous and focused in-service training of supervisors in effective facilitative supervision[20].

Strengths and limitations of the study

The main strength of the current study was the use of triangulation which provided both quantitative and qualitative data allowing researchers to validate data derived from each method.

A major limitation was the small sample size of this study. The team of data collectors observed each supervisor for only one day, due to resource and time constraints. It would have been useful to observe the same supervisor at various facilities, to increase the extent to which the study captured their typical interactions with supervisees. The supervisors who participated in the study may have performed differently than usual due to the presence of the observers and their awareness of the audio taping although we tried to avoid its impact during data collection. Subjectivity of the observer may also have weakened the study, although the team of data collectors received focused training collectively prior to the study. Employing a retired SPHM to collect data could have introduced a bias in the study.

Conclusions

This study indicates that prioritisation of supervisory activities and time management is lacking among SPHMs. SPHMs also lacked other necessary skills that ensure a higher quality of SPHM-PHM interaction that was independent of the duration of their work experience.

Recommendations

The authors recommend providing continuous training and support on key supervisory skills, improving the knowledge of supervisors on important facilitative supervisory activities and developing new job-aids to be used during supervision by SPHMs.

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