International Journal of Medical Science in Clinical Research and Review
Online ISSN: 2581-8945
Available Online at http://www.ijmscrr.in Volume 05|Issue 06 (November-December)|2022 Page: 1130-1135

Original Research Paper

Assessment of Training Outcome for Community Health workers in Tapi District, Gujarat

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Article Received: 15-10-2022 Revised: 04-11-2022 Accepted: 24-11-2022

ABSTRACT:

Background: Trained health workers are the most important key in delivering health care through improving understanding, knowledge, and techniques along with practices, performance, sense of job responsibilities and the problem-solving abilities. Training helps employee to provide understanding, knowledge, techniques, and practices. It helps to improve performance and effectively fulfil the job responsibilities in addition to one's personal and professional development. Training also helps in better decision making and developing approach towards finding a solution for any difficulties. **Objectives:** To assess the knowledge of CHWs (Community Health Workers) regarding postpartum family planning, reproductive, maternal, new-born and child health before and after administering structured teaching programme. To evaluate the effectiveness of structured teaching programme by comparing the pre-test and post-test knowledge scores regarding postpartum family planning, reproductive, maternal, new-born and child health. **Material & Methods:** Out of 60 Primary Health Centres, 15 were selected randomly. From these 15 selected Primary Health Centres , 2 Female Health Workers and 1 Female Health Supervisor were selected as per availability and interviewed by open and close ended questionnaires. 5 Medical Officer and 3 Taluka Health Officer were selected as per availability and interviewed by semi structured questionnaires. Different methods of evaluation were also used like self-perception regarding training. **Results:** A total of 53 participants were enrolled. The average age of the participants was 35 years ±5.7 years. The participants had an average 10 years of working experience. Knowledge mean score of various thematic areas of participants increased from mean score of 21.9 to 25.4. It was observed that after training post-test knowledge score showed significant improvement. Paired T test was found to be extremely significant ($p<0.000$). Out of 30 FHWs (Female Health Workers) interviewed, 46% were on a regular basis, rest (54%) were vacant. They took varieties of trainings. When they were asked about how much knowledge and skill they can apply practically in the field after training, 7% replied average, 83% said it was very good and 10% found it excellent. **Conclusion:** Participants in short course training in District Training Centre had significant improvements in scores on tests of knowledge gained. Widespread implementation of similar training under NRHM (National Rural Health Mission) may bridge knowledge gaps for various health functionaries but still whether shorter knowledge gains are retained in the longer term remains unknown.

Keywords: Councillors, Knowledge, NRHM.

INTRODUCTION:

Community health workers played a key role in delivering healthcare in rural and remote populations, through primary care, prevention, and education. Community health workers provide a "reasonable level of healthcare to underserved populations.[1]Reducing maternal and child mortality were among the most important goals of the National Rural Health Mission

with the aim to increase institutional delivery. Motivated work forces impart their duty efficiently at grass root level. Insufficient, unqualified staff cannot deliver quality work and beneficiaries may suffer due to this. In addition to this, overburden of work also reduces the efficiency in resource poor countries. Models of training, supervision, and development of FHWs varied over time and differ in contexts. The quality of training largely determines the quality and effectiveness of the FHW program. As such, multiple models of training have been developed to promote effectiveness of FHWs and the programs. [1-5] Rural population relies more on a nurse or midwife for primary health care. India has a poor record of ensuring access to affordable services for poor and geographically isolated populations.[6] With a population of 1.34 billion[7] and 67% living in rural areas,[9] a model of disseminated FHWs is essential to provide accessible healthcare. Realising this, in 2008, the National Health Mission of India capitalised on the existing FHW model in conceiving of and implementing the Accredited Social Health Activists (ASHA) program.[8] These government-supported community health workers have helped make progress towards improving health coverage in India, though non-government health and development workers help bolster the government systems, particularly in rural and remote areas. Training helps employee to provide understanding, knowledge, techniques, and practices. It helps to improve performance and effectively fulfil the job responsibilities in addition to one's personal and professional development. Training also helps in better decision making and developing approach towards finding a solution for any difficulties. It is important to carry out periodical training needs and outcome assessment for the staff members in public health. In this backdrop, assessment of training outcome of Community Health workers was done in Tapi District.

OBJECTIVES:

1. To assess the knowledge of CHWs (Community Health Workers) regarding postpartum family planning, reproductive, maternal, new-born and child health before and after administering structured teaching programme.
2. To evaluate the effectiveness of structured teaching programme by comparing the pre-test and post-test knowledge scores regarding postpartum family planning, reproductive, maternal, new-born and child health.

METHODOLOGY:

District Training Centre is a premiere institute in Tapi District which routinely imparts training to all the health care functionaries working at different levels of health care institutions of 6 Talukas. Training was held in different batches. The trainers team consisted of One Public Health Specialist Facilitators, faculty of medical college including gynaecologist, paediatrician and Social worker (state TOT). The trainees were health workers and were directed by their Taluka Health Officers to attend this training. The recruitment of participants to a particular batch was not controlled by investigators. Each batch consisted of 20 participants, who were nominated by their respective Block Medical Officers. The key focus of the training was to build the competency of participants through repeated simulated practice of counselling in the classroom and hospital setting, using simple counselling skills checklists and job-aids. The case studies were done at medical college because of its easy access. The conventional Five day training package was delivered as per national guidelines and the fifth day was added for training in various newly introduced various health programs related to maternal and child health including an important gender sensitization lecture. Standardized training material developed by Government of India was used. Didactic lectures were delivered by experienced specialist of public health professionals, gynaecologist and paediatrician in the forenoon while in afternoon visit to field were conducted for translating learning into practice sessions. Various determinants of maternal and child health were discussed and counselling method were demonstrated in the clinical and community settings. A variety of training activities like interactive presentation, group activities, case studies and role-plays were included which established an energetic and positive learning environment. The assessment of the participants was done for knowledge and its related counselling skills at the beginning and end of each thematic area. The purpose of this assessment is to assess the gain in knowledge and skills through training. A multiple choice questionnaire was administered before and after the training to asses' participant knowledge of relevant thematic areas i.e. family planning, maternal and newborn health, child health and counselling skills. Scoring criteria: For each correct answer, the participant got one mark, for each incorrect answer or question not attempted the participant got 0 marks. For evaluating score percentage, following formula: X (Marks obtained)/10 × 100 = ……. % was used. The accepted level in post-test was 80%. Those who received below 80% were called for one-to-one discussion of his/her paper and if needed, again called for training. This study was conducted on 2021 in months of September and October , six Talukas of Tapi district (Valod, Uchchhal, Songadh, Nizar, Vyara, and Dolvan). Total 15 Primary Health Centres out of 60 Primary Health Centres from the above district were selected randomly. Among these selected Primary Health Centres , 2 Female Health Workers and 1 Female Health Supervisor were selected randomly as per availability, and they were then interviewed by open

and close ended questions. Then 5 Medical Officers and 3 Taluka Health Officers were also interviewed by semi structure questionnaires according to availability.

RESULTS:

53 Community Health Workers were interviewed about how much valuable the training was for them, it was found that overall impression of training was very good in 20% Community Health Workers and good in 80% Community Health Workers. All have received learning material after training eithe booklet, module, or both for further references. Various communication aids were used in the present training which helped them in improving their knowledge significantly. The opinion of FHWs is as follows: All the Community Health Workers had made efforts to apply their knowledge in the field after training. Maximum effort was seen in 6% individuals, very good efforts was found in 17%, minimum efforts was observed in 60% individuals, and no efforts in 1% individuals.

Table 1: Self perceptions of the training process among the CHWs

Score	Opinion for CHWs	No for CHWs (53)
0-20	Weak	0
21-40	Below average	0
41-60	Average	13 (24%)
61-80	Very good	29(55%)
81-100	Excellent	11 (21%)

The opinion of the training material provided to CHWs, gives the opinion that 41-60 score were average 24%, 61-80 score were given very good opinion 55% and 81 -100 score were given excellent opinion 21%. A total of 53 participants were enrolled. The average age of the participants was 35 years ±5.7 years. The participants had an average 10 years of working experience. Table 1 shows knowledge mean score of various thematic areas of participants increased from mean score of 21.9 to 25.4. It was observed that after training post-test knowledge score showed significant improvement

Table2: Knowledge mean score of various thematic areas.

Mean score	Pre test	Post test	% increase
Family planning.	6.8(68%)	7.8(78%)	10
Maternal and newborn	8.1 (81%)	9.6(96%)	15
Child health	6.9 (69%)	8.0(80%)	11
Total	21.9 (73%)	25.4(84.7%)	11.7

***p value based on paired T test for means.**

Paired T test was found to be extremely significant ($p<0.000$). It was observed that 50 % of the participants knowledge score improved to more than 80% after training (Table 2).

Table 3: Knowledge score in terms of percentage.

Knowledge Score	Pre Test N(%)	Post Test N(%)
100%-90%	8(15.3)	13(25)
89%-80%	6(12.1)	13(25)
79%-70%	7(13.4)	15(28.8)
69-60%	12(23.1)	7(13.5)
<60%	19(36.5)	4(7.7)

DISCUSSION:

Appropriate knowledge and interpersonal communication expertise, in addition to basic clinical skills, supplies and supervision, is a key to the work of community health workers.[[10] Our study evaluating the knowledge transfer and quality counselling skill among participants of a training course directed at health workers suggests that a short, intensive exposure to various reproductive, maternal, newborn, and child resulted in a significant improvement in knowledge acquired. These workers can be of great help in acting as FHWs councillors as WHO has suggested that Community health workers have been used in many settings for plugging the gaps in service delivery, when skilled personnel cannot be deployed for any reason. [11] The magnitude of increase in our study test scores, greater than 10%, in all the thematic areas was large and statistically significant, similar to other studies elsewhere. [12] Several other studies have found improvements following a course conducted by Sprague S et al a 2.5-day evidence-based medicine for surgeons showed improvement up to 10 points while a course conducted by K Dinesh et al, in AYUSH practitioner, knowledge of the participants has shown much higher improvement up to 30 points, and an 8-day Integrated Management of Neonatal and Childhood Illness (IMNCI) showed improvement upto 40 points. [13-15] Various communication aids were used in the present training which helped in the significant improvement of knowledge. Demonstration and skill acquiring sessions was also observed to be very effective in acquiring knowledge.[16,17] . Supervision serves as the point of human interconnection between health workers and the health system, and it can encourage motivation through orientation to the organization's values [18]. This contact is a central tool for supporting front-line health workers such as FHWs who deliver care in isolated rural settings with limited training [19]. Various studies have shown that Skills based training accommodates the different learning styles of participants; helps diminish the gap between theory and practice and may allow for a better integration of theoretical concepts.[20] In our study standardized health education material was used to focus attention, to provide new knowledge, to facilitate interpersonal and group discussions and reinforce or clarify prior knowledge and behaviour. Another study suggest that Community health workers have made a measureable impact on health indicators by bridging the gap between community and the health care delivery system, enhancing health service utilization and creating awareness about health practices among people through health education.[21]

LIMITATIONS:

Although 100% participants completed the pre and post post course test, there were observed extreme knowledge test scores; whereas some participants excelled (obtained a score of 100-90%), others did not (obtained a score less than 50%). It remains plausible that participants who initially felt uncomfortable with the training neglected to complete the pre course test, as the participants were well aware of the various thematic areas. Another limitation, Given that the tests did not impact the success of a participant's completion and certification of attendance, some may have been less motivated to put effort into the tests, which may have affected their scores. Along with partnered with a small sample size, accounts for the wide range of score we reported. Finally, we cannot generalize the short-term improvements that we observed to sustained longer-term knowledge about various thematic areas.

CONCLUSION:

Participants in short course training had significant improvements in scores on tests of knowledge gained. Widespread implementation of similar training may bridge knowledge gaps for various health functionaries but still whether shorter knowledge gains are retained in the longer term remains.

RECOMMENDATIONS:

Health workers are trained regularly in different programs but as counselling plays a very important role in behaviour approach of population, so further field based evaluation is needed to assess the practical impact of training and outcome is to be studied. Creating skill labs with linkages for post training mentoring is one intervention that can be used to accomplish this.

DECLARATION:

Funding: Funding sources.
Conflict of interest: None declared.
Ethical approval: The study was approved by the Institutional Ethics.

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