

EVALUATION OF SHORT TERM TRAINING IN MENTAL HEALTH FOR MULTIPURPOSE WORKERS

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Training of multipurpose workers in mental health is an essential component in the implementation of the National Mental Health Program. This study examines the efficacy of a six day training program and the changes in knowledge, management skills and attitudes of multipurpose workers with regard to mental disorders.

INTRODUCTION

During the past 2 decades, major advances have occurred in the care of mentally ill. The shift has been from the hospital to the community and from specialist care to integrated care. Based on the recommendations of major health committees, (Bhore, 1946; Mudaliar, 1962; Srivastava, 1975) there has been a growing increase in the training of different categories of mental health professionals and interest in research into various aspects of mental health.

Epidemiological studies in India have indicated that seriously incapacitating mental illnesses are likely to affect at least one percent of any population at any one time and at least ten percent at some time in their life. For an estimated population of over eight hundred and fifty millions, there is one psychiatric bed per 32,500 population. About one half of these beds are occupied by long-stay patients adding to the shortage of active "treatment" beds. There are only about 5 mental health professionals per million population. Even these available services are under utilized because of various reasons like social stigma, distance, poverty, ignorance and traditional beliefs and practices. A very limited number of those requiring mental health care are receiving the needed help in rural areas since the available manpower and facilities are all located mostly in cities.

The gross neglect of mental health needs of the population in developing countries has been due to the poor resources and non availability of inadequately trained personnel. It appears that for a long time to come, the developing countries will not have adequate resources to afford sufficient number of mental health professionals to organize mental health care to rural populations (NIMIANS, 1990). It has been suggested that 'basic mental health care' - in the first instance of detection and management of all persons with psychosis and epilepsy in the

community should be decentralized and integrated with the general health care services. The primary health care workers and rural doctors could be trained to deliver 'basic mental health care' (Carstairs, 1973; WHO, 1975; Giel & Harding, 1976; Carstairs & Kapur, 1976). It has been pointed out that no clear cut model is so far available for delivery of mental health services and their feasibility has not been demonstrated in the Indian setting (Wig & Srinivasamurthy, 1978).

The General Health care services in India is mainly carried out through primary health center personnel. For every 3000 population there is one male and female multi-purpose worker (MPW) who are trained to carry out preventive, promotive, curative and rehabilitative services in general health care (DGHS, 1982a). National Mental Health Program for India (NMHP) envisages integration of basic mental health care in the general health services. One of the objectives of NMHP has been the utilization of existing primary health center personnel for the provision of mental health care (DGHS, 1982a).

In order to implement the NMHP in India, training programs for primary health care personnel especially for MPWs have been initiated in a number of centers (NMHP, 1989). Studies on mental health care (Wig et al, 1980; Kalyan Sundaram et al, 1980; Wig et al, 1981; Isaac et al, 1982; Srinivasamurthy, 1983; Goutam, 1985; Isaac, 1988) by involving MPWs in delivery of mental health care have documented that MPWs could be involved in identification and management of priority mental disorders in the community after a brief training in mental health. These experiences have also reported gain in the knowledge and change in attitudes. The basic limitation of these studies have been the variations in the training, duration, methodology, content and evaluation. The present study focusses on the specific issue of evaluation of the short term training for health workers.

AIMS

1. To assess the change in knowledge of multipurpose workers towards mental health subsequent to a training program in mental health.
2. To study the change in the multipurpose workers' skills in managing mental disorders, and
3. To evaluate the changes in attitude of multipurpose workers towards mental disorders.

METHODOLOGY

The study was conducted in Rural Community Mental Health Center, National Institute of Mental Health and Neuro Sciences, Bangalore. This center has been involved in service, training and research activities in rural mental health care delivery. The center has so far trained more than 1000 multipurpose workers from Karnataka state since 1982.

Training Module

It is an ongoing residential training program of 6 days duration. A multidisciplinary team of mental health professionals are the trainers. A common format of training program has been developed with teaching methods consisting of lecture-cum-discussion with audio and video facilities, clinical case

demonstration, field training in the identification and management of mental disorders and role play sessions by the trainees. The content of the training is based on the Manual of Mental Health for Multipurpose workers (Srinivasamurthy et al, 1988).

Study Subjects

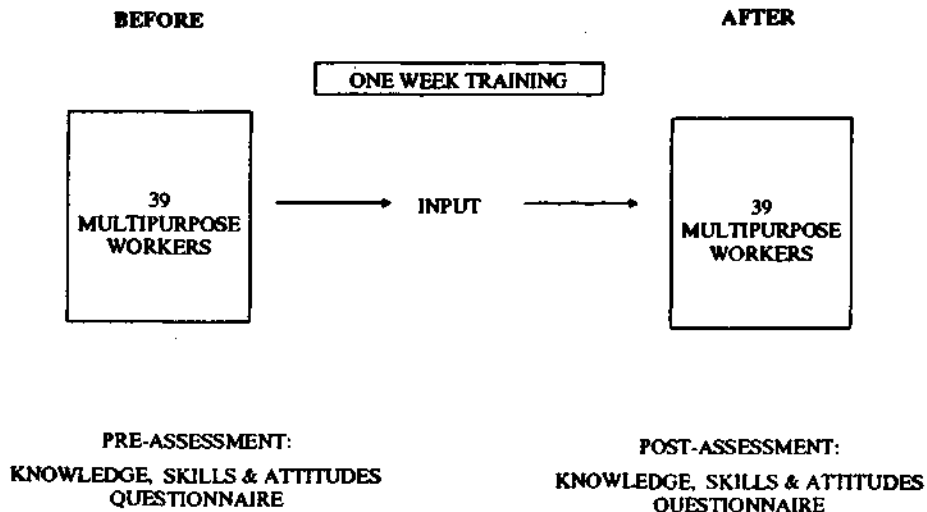
Thirty nine subjects deputed by the Directorate of Health and Family Welfare services of Government of Karnataka who participated in the training program formed the study subjects.

Tools

The assessment instruments used in the study were:

1. Socio Demographic Schedule: This consists of 11 questions related to MPWs personal profile, work profile, economic condition and family details.
2. The Knowledge Questionnaire: This consists of 35 items constructed on multiple-choice format. The trainees choose the single best possible answer from the given 3 answers.
3. The Attitudes Questionnaire: This consists of 35 items rated on a three point scale, viz. agree, disagree or do not know. The questionnaires 2 and 3 cover the nature, causes and management of psychosis, epilepsy and mental retardation.

FIGURE SHOWING ONE GROUP PRE-TEST POST-TEST DESIGN IN THE PRESENT STUDY



4. **Case Vignettes:** Seven different case vignettes dealing with mental retardation, epilepsy, acute schizophrenia, mania, depression, chronic schizophrenia and neurosis developed by Wig et al (1980) were utilized for assessment of perceived management skills. Seven questions common to all the vignettes was constructed with single best response rating of the questions.

5. **Opinion Questionnaire:** Opinion of the subjects on short term training in mental health with 9 questions framed by the investigators was used.

Design of the study

The design of the study is quasi-experimental with the single group pre-post test model [Figure 1], that is, only one group is observed before and after the independent variable is introduced. (Seaman & Verhonic, 1982).

Data Collection procedure

The data was collected by administering each instrument individually before and soon after the one week training program in mental health.

Analysis

The data was analyzed using the descriptive statistics in terms of percentile distribution and in order to compare the pre and post differences inferential statistics in terms of paired 't' test was used (Garrett, 1986).

RESULTS

Table 1 shows the characteristics of MPWs, who were assessed before and after the training program. The MPWs are heterogeneous in terms of age, duration of service and qualifications.

Tables 2 to 4 show the MPWs scores obtained on knowledge, attitude and perceived management skills before and after the one week training program in mental health. The domain-wise and over all scores revealed statistically significant differences between pre and post assessment scores. This implies a significant increase in the knowledge, perceived management skills and positive change in attitudes towards mental disorders.

Table 5 reveals the opinion of MPWs towards the one week training in mental health.

DISCUSSION

Evaluation plays a vital role in mental health training programs. Evaluation provides insights to the trainers about the strengths and weaknesses of the trainees and also issues relating to the drawbacks

Table 1
Background characteristics of MPWs

Characteristics	Domains	n=39	Percentage
Age (in years)	Below 29	08	20.5
	30-39	10	25.7
	40-49	13	33.3
	50 and above	08	20.5
Sex	Male	38	97.4
	Female	01	2.6
Marital Status	Unmarried	03	7.7
	Married	35	89.7
	Widow	01	2.6
Education	S.S.L.C.	28	71.8
	P.U.C.	05	12.8
	Graduation	06	15.4
Designation	JHAS	30	76.9
	SHAS	09	23.1
Duration of Service (in years)	Below 15	17	43.6
	15-24	11	28.2
	25 and above	11	28.2
Monthly income (in Rupees)	1999 and below	11	28.2
	2000 to 2499	12	30.8
	2500 to 2999	12	30.8
	3000 and above	04	10.2

Table 2
Pre and Post training : Knowledge of mental disorders

Mental disorders	Pre training		Post training		t' value	Sig.
	Mean	S.D.	Mean	S.D.		
Psychoses	9.28	1.97	16.38	1.18	21.920	<0.001
Epilepsy	2.95	1.10	7.44	0.79	19.106	<0.001
Mental Retardation	2.00	1.10	4.41	0.82	13.197	<0.001
Treatment adherence	2.38	1.02	3.64	0.58	7.514	<0.001
Total Score	16.61	3.12	31.87	2.19	28.210	<0.001

Table 3
Pre And Post training : Attitude to mental disorders

Mental disorders	Pre Training		Post Training		t' value	sig
	Mean	S.D.	Mean	S.D.		
Psychosis	28.87	3.29	38.28	3.03	12.564	<0.001
Epilepsy	29.10	2.84	37.31	1.89	17.172	<0.001
Mental Retardation	12.95	2.29	19.23	1.80	14.560	<0.001
Total Score	70.92	5.19	94.82	4.39	22.596	<0.001

For tables 2, 3 and 4, degrees of freedom = 38.

Table 4
Pre And Post training scores: Management Skills of mental disorders

Mental disorders	Pre Training		Post Training		t' value	sig.
	Mean	S.D	Mean	S.D.		
Mental Retardation	3.85	1.16	5.28	0.97	5.776	<0.001
Epilepsy	3.18	1.05	4.74	1.29	5.601	<0.001
Acute Schizophrenia	2.28	1.02	4.03	1.48	6.871	<0.001
Mania	2.92	1.44	4.10	1.50	4.150	<0.001
Depression	2.38	1.09	3.92	1.22	5.992	<0.001
Chronic Schizophrenia	2.95	1.34	4.10	1.70	3.416	<0.01
Neurosis	3.36	1.27	4.47	1.36	4.977	<0.001
Total Score	20.92	4.54	30.84	6.09	8.677	<0.001

Table 5
Opinion of Multipurpose Workers on Training Programme

Sl.No.	Domain	Opinion	n=39	%
1.	Subject coverage	Adequate	30	76.9
2.	Understanding of content	Easily Under-standable	34	87.2
3.	Applicability of knowledge gained to field practice	Very well applicable	25	64
4.	Duration of training	Adequate	25	64
5.	Case demonstration during training	Sufficient	33	84.6
6.	Method of assessment	Adequate	38	97.4
7.	Relevance of case examples to field practice area	Well Represented	29	74.4

in methodology during the short training programs. Small and Regan (1974) and Small (1975) have discussed the advantages and limitations of psychiatric training program. Sriram et al (1990) have studied the use of Multiple Choice Questionnaire (MCQ) and found these to be sensitive in assessing gain in knowledge in mental health care delivery. Further, vignettes as a tool of assessment of clinical performance skills and reliability in the evaluation of mental health training of general practitioners was reported (Shamsunder et al, 1989).

The Multipurpose health workers who were assigned to undergo this training were heterogenous in terms of age, experience, qualification, marital status and religion. It is interesting to note that none of the MPWs had undergone any formal training in

mental health in spite of the fact that their basic course curriculum consists of 10 hours of teaching on mental disease (DGHS, 1982b).

A number of factors are likely to influence the observed performance of the trainees in a training program. These include the trainer variables like competence and the ability to create interests in the trainees, training variables like the physical structure, the methods adopted to impart the training - such as lectures, discussions, case demonstrations and role play, the trainer variables like background of the trainees, baseline knowledge and interest in learning and lastly the assessment variables like the assessment procedure and the validity and reliability. In the present training program, training being an ongoing activity of the center, the trainers and the training methods are well established and constant for every batch. The procedures for the assessment are also uniform. Thus, the observed differences in the performance can be largely attributed to trainee variables.

The knowledge gained following the training program indicates a statistically significant change with regards to psychosis, epilepsy, mental retardation and treatment. The pre-assessment scores ranging 11 to 12 increased to 25 to 35 in post-assessment. This amount of gain is probably due to the use of knowledge questionnaire (MCQ) specifically constructed based on the program content. Similar findings have been observed by Isaac et al (1982), Goutam (1985) and Sharma et al (1987).

Further, the results showed that there is a statistically significant gain in perceived management skills of MPWs following the training program. The range of scores in pre training assessment being 13 to 31 which increased to 18 to 42 on post training assessment. This difference in scores as compared to knowledge gain is low. This indicates the need for more inputs in training. Similar findings have been reported by Narayana Reddy et al (1987) and Wig (1981) based on the follow-up reports of MPWs field level work after the training. The limitation of the present study is that the skills as perceived by the MPWs are assessed rather than assessing the skills as practiced by the MPWs in the field.

Regarding the attitudes towards psychosis, epilepsy and mental retardation, the difference between pre and post training scores showed a statistically significant difference. The change in the attitude is in the positive direction. The pre-training scores being 60-80 increased significantly 85 to 102

in post training assessment. The studies conducted by Wig et al (1981), Harding et al (1983) has also brought forth similar findings.

In the present study the time gap between the two measurements is one week. The consistency of the changes brought about during this period over a period of time need to be studied. Long term studies over several months and years are needed. Though different methods are used to evaluate the training program on a small group of subjects, application of similar evaluating design to larger samples in different centers with proportionate involvement of both sex of MPWs will help in further validating and replicating the findings of this study.

IMPLICATIONS

The present study indicates the feasibility of integration of mental health into general health care through primary health center personnel. It emphasizes the changing roles of mental health professionals in decentralization of services and dissemination of knowledge and skills to the paraprofessionals and non-professionals specially in developing countries. This has been rightly emphasized that if basic mental health care is to be brought within the reach of the population, this will have to be done by non-specialized workers at all levels from primary health workers to nurse to doctor. The non-specialized workers can be supported by mental health professionals (WHO, 1984).

The findings of the present study indicate the potentials of multipurpose workers' contribution towards mental health care. They could play vital roles in providing basic mental health care to the needy at the level of the community. This aspect assumes much importance in the context of implementation of NMHP for India.

CONCLUSION

The study reveals statistically significant gain in knowledge, perceived management skills and also change in attitudes of multipurpose workers with regard to mental disorders following one week training in mental health care.

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