
RESEARCH REPORT

PROVISION OF MATERNAL & NEWBORN HEALTH CARE: LHWs WORK-RELATED STRESS, PERCEIVED JOB DESCRIPTION AND PROBLEMS

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**Save the Children (SC/US) Pakistan (SNLI)
Human Development Research Foundation (HDRF) Islamabad**

CONTENTS

Chapter	Page Number
ABSTRACT	
1. INTRODUCTION	01
2. METHODS	10
3. RESULTS	
1. Demo-Graphic Profile of LHWs	14
2. Overall Results of LHWs Sample	23
3. Results of Subgroups of LHWs	28
4. Results of Perceived Job Description	41
5. Reported Problems of LHWs	43
6. Sources of Pressure in Job for LHWs	45
7. Job Satisfaction Among LHWs	46
8. Results of Focus Groups Discussions	
I. Identified Problems in Focus Groups	47
II. Identified Local Practices for Newborns	48
III. LHWs Suggestions for Improvement	50
4. CONCLUSION & RECOMMENDATIONS	51
5. REFERENCES	54
Appendix A.	Instruments used in the study
Appendix B.	Focus Group Report
Appendix C:	Actual Job Description of LHWs
Appendix D.	Research Agreement & Research Proposal

Abstract

Background

High rates of child mortality and mother mortality have been reported in Pakistan. Lady Health Workers (LHWs) have been entrusted as agents for the delivery of mother and child health care at grass root level, under the auspicious of National Family Planning & Primary Health Programme since 1994. The programme has been evaluated externally and its variable success has been reported along with recommendations for improvement in quality services delivery. However, LHWs work related stress, perception of their job description and problems have not been scientifically researched. Research in other countries has suggested that workers level of stress, nature of perceived job description and problems directly affect their quality of work.

Method

150 LHWs employed in 15 union council of a sub-district of Rawalpindi were interviewed to assess level of job related stress, using Self-Reporting Questioners (SRQ-200), Demographic Profile Form, and two sub-scales of Occupational Stress Indicators (OSI). Six Focus Group Discussions were conducted with a sub-sample of LHWs to identify their job related problems, suggestions for improvement and local practices for the care of newborns.

Results

About 26% LHWs have work-related stress and 19% LHWs have pressure on job. LHWs of low socio-economic status have more work-related stress as compared to the LHWs of higher socio-economic status. Self-reporting Questionnaire and Sources of Pressure on Job have positively correlation ($r = 0.219$). LHWs' perceived Job Description significantly differ from the Actual Job Description. LHWs identified an in-depth list of their problems, suggestion for the improvement of their job description and local practices for the care of newborns in Focus Groups Discussions.

Conclusion

Over one quarter of LHWs face work-related stress as a mental distress, along with other pertinent problems at primary health care level. This situation is adversely affecting their efficiency to deliver mother and child health care services as 'key primary service delivery agent'. Recognizing LHWs work-related stress and problems, effective joint measures should be initiated to improve the quality of their crucial role at primary health care level.

Lady Health Workers: Psychological Distress and Work Efficiency – Preliminary Report

Human Development Research Foundation, Pakistan

Introduction

Pakistan is a developing country with more than 140 million population. It is consisted of the area that has been abode of various civilizations since the 2500 years. It has traces of the European, West Asian, Central Asian and South Asian cultures leading to rich cultural heritage and genetic diversity. Despite these strong potentials the children of Pakistan have been victim of various diseases. According to UNDP's National Human Development Report 2003, the children in Pakistan from lower income families face a high risk of disease and death, suffer stunting and wasting of the body associated with widespread malnutrition. They are forced to work for a living, some times in hazardous occupations. They have not only to work for long hours and face a wide range of disease and injuries, but are also occasionally subjected to physical beating and sexual abuse.

About 123 out of 1000 children die before the age of 5 years (16). While most of the surviving children suffer from malnutrition leading to impaired immunity and higher vulnerability to infections. The National Health Survey shows that between 30 % and 40% of children suffer from stunting (i.e. low height for age); and similarly about 14% of children suffer from wasting (i.e. low weight for height). About 44% of rural children and 35% of urban children are underweight (i.e. low weight for age). All three of these measure of malnutrition (stunting, wasting and under weight make children vulnerable for recurrent infectious diseases. It has been shown that about 38% of the children between 5 to 14 years of age in rural areas and about 25% of the children in the urban areas between 5 to 14 years of age have ill health ranging from poor to just fair. Thus, it is evident that a large proportion of children are suffering from malnutrition and associated frequent illness. Consequently, they have an impaired ability to learn and play, so crucial to the creative experience of childhood. The ability of children in Pakistan to acquire an education is constrained not only by their malnutrition and resultant illness but also by the limited opportunities of education and inadequate health facilities.

Further, Indicators of maternal and child health in south Asia, including Pakistan are among the worst in the world (1). Low literacy and high fertility coupled with poor economy translates into high morbidity and mortality. Women and children are the most vulnerable segments in term of health. The infant mortality rate is 85/1000 live births and maternal mortality ratio (MMR) is 350-400/100,000 live birth (2). These statistics are worst among the world (3). In this age of scientific and medical advancement, most of the causes of maternal and infant mortality and morbidity are avoidable. Hence, the need for effective strategies for the delivery of maternal and newborn healthcare in primary health

care system is paramount. For the development of a nation, it is essential that attention be paid to mother and child health, as the future depends on their well being and health.

According to, National Economic Survey of Pakistan (2002-2003), health is priority area of the government's activities. The high correlation between the expenditure on health and productivity in developing countries is enough to emphasize the importance of increasing health services as an aid to growth. Hence in the health sector, poverty and ill health needed to be brought into sharp focus. Provision of better health facilities to improve the standard of living of the people in country has been the paramount aim of efforts. Health infrastructure has developed significantly over the years. However, the improvement so far made is far from the optimal levels. A number of inadequacies such as unhygienic living conditions, spread of health facilities, scarcity of potable water, paucity of resources to meet the recurring expenditure, malnutrition particularly among the children and women of reproductive age are serious concerns. Low life expectancy (63 years) and high child mortality rate (110/1000) and high population growth rate at 2.1 % provides the basis for rethinking of national health priorities and point out to the need for better health care and preventive services.

Review of these reported statistics shows that child mortality rate ranges from 85 to 123 per 1000 live births, which is alarming, if even any figure of the range may be taken as an accurate one.

Neonatal mortality ranges from 40% to 60% of all infant mortality and about 60% of neonatal deaths occurs in the first week of life in Pakistan (5). This situation demands identification and bridging of gaps between service delivery at primary health level and programming, involving all the stakeholders; to save the lives of newborns in Pakistan.

One of main stakeholders is National Family Planning and Primary Health Programme of the government of Pakistan. As, the majority (60%) of Pakistan's population resides in rural areas. In the rural areas, basic health care is provided through a well-established, hierarchal, public health delivery system consisting of Basic Health Units (BHUs), Rural Health Centers (RHCs), Tehsil Headquarter Hospitals (THQs) and District Head Quarter Hospitals (DHQs). The government has been committed to maintain the expansion of health facilities and a number of health programmes have been undertaken in this regard. The National Programme for Family Planning and Primary Health Care is one these programmes since 1994. The programme aims at delivering basic health services at the doorsteps of the unprivileged segment of the society through deployment of Lady health Workers (LHWs) living in their own localities and their houses have been designated as 'health house' where they are accessible 24 hours. The programme has established an organization of paid community health workers (2).

Over the years LHWs role in mother and child health care programmes has increased incrementally. The programme is currently being implemented with the strength of 70,000 LHWs and 3000 Lady Supervisors nationwide mainly in rural areas and urban slums of the country. These workers are providing services to their communities in the field related to promotive and preventive primary health care including mother & child

health care, nutrition, family planning and treatment of minor ailments. The LHWs provide health education and promote improved health behavior, including the use of basic preventative health services. Their main duties include advice on antenatal care (mainly tetanus toxoid, nutritional advice and iron folate supplements); referral for appropriate delivery care; newborn care including cord care, initiation of breast-feeding, counseling about prelacteals and thermoregulation, as well as appropriate referral for danger signs and initiation of immunization after birth (5).

Recently, the scope of LHWs has been enlarged to include the wider concept of Reproductive Health. The LHWs have been involved in vaccination of women and children under the Extended Programme for Immunization (EPI). In view of this important role of LHWs at the grass root level, the government has decided to utilize their service in many other public health programmes. At present, the National Programme is covering 50% population. This programme is expanding in a phased manner and by the year 2005, the target of 100,000 LHWs in the field will be achieved covering 90% of the target population (14).

It is evident that the programme has become a vital source of primary public health care delivery in Pakistan. Recently, LHW programme has been externally evaluated. The quantitative survey provides a valuable insight about the overall functioning of the programme. It has been concluded that the programme has succeeded in creating a large, broadly functional organization of female community health workers. Programme management and supply systems are in place and are functioning, though with variable degree of success. There is reasonably good evidence that the programme has improved the uptake of important health services in the population it serves. This represents a substantial achievement in an environment where public sector provision of health services is often poor. However, the programme needs to build on what has been achieved, especially, it needs improvement in the quality of service delivery and under performance/utilization of existing LHWs (4).

Hence, it is crucial to study scientifically various functional aspects of the programme to improve and strengthen, its quality service delivery. In this regard, Role of LHWs is central, being a main service delivery agent. So, if we want to improve the functional quality of the programme, we have to focus on improving quality work of LHWs, particularly with reference to save the lives of newborns. Thus, it is very pertinent to study LHWs own perception of their job description in mother and child health care programmes. This aspect has been least researched. We don't know scientific answers to different relevant questions such as how they perceive their job description? How they feel about their personal adequacy or otherwise of their training? What is the level of their work-related stress? What kind of problems they are facing in performing their duties? What they suggest to improve their performance?

All these questions as well as their answers are directly related to the quality of service delivery, particularly with reference to maternal and newborn care, which is one of the key duties of LHWs at a grass root level. A LHW is a key agent; she should be physically, mentally and socially healthy to perform her duties at an optimal level of

professional functioning. Present study is an effort to understand those factors, which may undermine the 'optimal functioning' of a LHW.

One of the possible underlying factors for LHWs is work-related stress. Can stress affect performance or efficiency of individual? Answer is yes, it can affect adversely. For example, different studies in other countries have shown that high level of stress in health workers can have an adverse impact on their efficiency (6,7,11). 'Stress' is referred to any physical or psychological event perceived as potentially constituting physical harm or emotional distress. It can lead to physical illness indirectly through its effects on health-related behavior and directly by interfering with the immune system.

By virtue of their job description, LHWs spend more time at work than in other single activity, because they often work with others, hence, the findings and principles of social psychology are helpful to explain their behavior in work settings. In this regard, Job satisfaction is an important construct, which is referred to an individual's attitude toward her job, it is influenced by organizational factors, such as working conditions and the fairness of reward systems, and personal factors, such as seniority, status and specific personality factors. Recent findings suggest that job satisfaction is often highly stable over time for many persons. Individuals often engage in prosocial behavior at work. This is known as '*organizational citizenship behavior*' (OCB), and it can take many different forms. OCB is influenced by several factors, including job satisfaction, the extent to which employees feel they are being treated fairly by their organization, and the extent to which they define their job responsibilities broadly. OCB can also be performed because employees perceive it as instrumental to obtaining promotions (17).

'I am stressed out' is the refrain of many health workers. They know well the experience of distress or strain that can accompany work. They also know, however, that there are times when they operate "*in the zone*" at work. Time is suspended; there is a feeling of engagement, intense task focus, and pleasurable emotions. Yet it seems easier for workers to describe the negative experience of stress than the positive experience of stress. Although many have heard the term *distress*, few are familiar with *eustress* (19). Can work attitudes indicate stress and eustress? The researcher gives answer to this question affirmatively. As each stress response, both positive and negative, will have its associated effect indicators and can be expected to produce differential effects on the outcome variables (e.g. health). Indicators of the stress response could be physiological, behavioral as well as psychological. The model of work-related stress is focused only on the psychological response of stress. The indicators of the positive response are positive psychological states (e.g. positive affect, meaningfulness and hope) and the indicators of the negative response are negative psychological states (e.g. negative affect).

Consistent with this holistic representation of work-related stress; *Eustress* has been operationally defined as "positive psychological response to a stressor, as indicated by the presence of positive psychological states" and '*distress*' has been operationally defined as "a negative psychological response to a stressor, as indicated by the presence of negative psychological states" (20).

In examining the prevailing views of what constitutes health, it appears that much lip service is paid to health as the presence of positive states, but operationally our definition of health remains the absence of disease. More than fifty years ago, health was defined by the World Health Organization (1948) as “ a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. Yet freedom from illness is still the norm in defining health for scientists and many of those in the medical community. A philosophical view of health more broad and asserts that the key concepts in life central to positive human health are having purpose in life, quality connections to others, self-regard and mastery. This view further asserts that human well being is multidimensional, dynamic process that involves intellectual, social, emotional and physical potential. Health then, is viewed as the presence of the positive in the mind as well as in the body. This view is consistent with the holistic model of health, which is consisted of six dimensions of health or wellness: *emotional, intellectual, spiritual, occupational, social* and *physical* (24).

The literature on work related stress has blossomed over the past ten years and several theories have emerged. There are four theories that have generated considerable attention; which are the *cognitive appraisal approach, the person-environment fit approach, the demand – control approach, and preventive stress management approach.*

The “*cognitive appraisal approach*’, emphasizes the individual’s role in classifying situations as threatening or non threatening. Accordingly, positive and negative responses can occur simultaneously, as a result of the same stressor and should be considered separate but related constructs. Following the initial appraisal, individuals then focus on either the stressor or their response. This approach highlights the difficulties of separating the stressor, the individual’s perception of the stressor and response. This approach exclusively focuses on negative responses and the associated coping mechanisms intended to alleviate them (19).

The *person-environment fit approach*, emphasizes the stressful nature of confusing or conflicting role demands. Fit is defined as a match between an individual’s skills and abilities and the demands of the job, communicated as clear role expectations. A lack of person-environment fit leads to distress. The bulk of the research on the person-environment fit model has focused on the negative i.e. the relationship between poor fit and distress and actions to take to improve fit (19).

The *demand – control model*, identifies a high-strain job as one that has a high level of responsibility, without accompanying authority. High-strain jobs are related to symptoms such as depression, job dissatisfaction and increased numbers of sick days absent from work. The model also suggests that the ‘best’ job is an active job, one in which high demands are balanced by high decision latitude. Most of the research attention on the demand-control model has focused on ways to redesign high-strain jobs by increasing the worker’s control (19).

The *preventive stress management approach* focuses on the joint responsibility of individuals and organizations to manage stress. Grounded in the notions of public health,

it advocates a three-tiered stress prevention model: change the cause of stress, manage the individual's response to stress and obtain professional care to heal symptoms of distress. This tradition pays homage to the notion of eustress, defining it as the healthy, positive, constructive outcome of stressful events and the stress response. The bulk of the work on preventive stress management is on the prevention and resolution of distress.

All, these four approaches are considered representative of the research on work related stress as whole. The emphasis, (as it has been in medicine and in health psychology), has been on the negative i.e. identifying causes of distress, identifying coping methods for dealing with stressors, and healing the wounds of distress. However, there is a lamentable lack of attention in identifying causes of eustress, defining eustress, identifying a process (similar to coping) of managing eustress, and finding ways of generating eustress at work (19).

What are the typical reactions, which an individual can manifest to stress? The term *burnout* is used to express consequences of stress or individual's reaction to stress. It is viewed as an effective reaction to ongoing stress whose core content is the gradual depletion over time of individual's intrinsic energetic resources including the expression of emotional exhaustion, physical fatigue and cognitive weariness (21).

During the 1980s and 1990s, research on burnout, regardless of the conceptual approach used, dealt almost exclusively with people oriented professionals such as teachers, nurses, doctors, social workers and police officers. Professionals in these occupational groups tend to be employed in the public sector. In most of today's advancing market economies, the public sector has to adjust to consumers' growing demands for quality service, downsizing and budgetary retrenchments. '*People-oriented professionals*' often enter their profession with service-oriented idealistic goals. They typically work under norms that expect them to continuously invest emotional, cognitive and physical energy in service recipients. In this context, the previously stated changes are likely to create a process of emotional exhaustion, mental weariness and physical fatigue.

Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that occur among individuals who work with people in some capacity. A key aspect of the burnout syndrome is increased feelings of emotional exhaustion – as emotional resources are depleted, workers feel they are no longer able to give of themselves at a psychological level. Another aspect of the burnout syndrome is the development of depersonalization that is negative, cynical attitude and feelings about one's clients. This callous or even dehumanized perception of others can lead workers to view their clients as somehow deserving of their troubles. The prevalence of this attitude towards clients among human service workers has been well documented (21). The development of depersonalization appears to be related to the experience of emotional exhaustion, and so these two aspects of burnout should be correlated. A third aspect of the burnout syndrome, reduced personal accomplishment, refers to the tendency to evaluate oneself negatively, particularly with regard to one's work with clients. Workers

may feel unhappy about themselves and dissatisfied with their accomplishments on the job.

The consequences of reaction to stress are potentially very serious for workers, their clients, and the larger institutions in which they interact. Initial research on this attitude involved interviews, surveys, and field observations of employs in a wide variety of human service professions, including health care, social services, mental health, criminal justice, and education (22).

The findings of various studies have suggested that burnout attitude could lead to deterioration in the quality of care or service provided by the workers. It appears to be a factor in job turnover, absenteeism, and low morale. Further, it is correlated with various self-reported indices of personal dysfunction, including physical exhaustion, insomnia, increased use of alcohol and drugs, and marital and family problems.

Measurement of stress

The measures of work related stress provide information about a number of factors that influence stress in the workplace, which include physical and psychological strain, social support, and individual differences in ability, personality and coping skills. Although all of the dimensions contribute to the understanding of the nature and impact of work-related stress, the omnibus nature of most job stress measures are both sources of strength and significant concern (23).

Work-related stress, sources of job pressure and job satisfaction can be measured or assessed with help of following instruments.

1. Self-Reporting Questionnaire

Work related stress is usually presented with psychological, physical or behavioral single and symptoms in a person, which can be easily identified using self-reporting measures. (9, 11) WHO's Self-Reporting Questionnaire (SRQ-20) is an instrument designed to measure levels of mental distress in the general population in community settings (8). It consists of twenty items designed to identify mental distress including psychological and somatic symptoms. Each item has a yes/no answer. The questions are referred to the individual's feelings over the past 30 days. Each item is scored 0 or 1. Maximum score is 20. The SRQ-20 has been used in many studies in Pakistan and therefore has good validity data (9,10).

2. The Occupational Stress Indicator (OSI)

Occupational Stress Indicator was developed to assess work-related or occupational stress in various work setting. Its construction and validation was guided by the theoretical work on 'stress at work' model. It is consisted of six major dimensions of occupational stress; which are sources of job pressure, control over job pressures, job satisfaction, type-A personality, coping strategies and physical and mental health problems (24).

Objectives of the study

Broadly, the present study was focused to understand personal efficiency and quality of service delivery by LHWs, particularly with reference to provision of maternal and child health care. Aim of the study was to understand those factors, which might be responsible for below optimal performance of LHWs. Hence; immediate objectives of the study were to:

1. draw up a sociodemographic profile of LHWs
2. compare level of work related stress in married and un-married LHWs
3. compare level of work-related stress in two age groups (20-35 & 35-50) of LHWs
4. compare level of work-related stress in LHWs with reference to their education level i.e. above Matric & below Matric school
5. compare differences between perceived job description and actual job description of LHWs with reference to maternal & newborn care.
6. assess work-related problems of LHWs
7. provide LHWs suggestions for the improvement of their job description

The following variable were operationally defined for their accurate assessment:

- Socio-Demographic Profile Variables, were age, education, marital status, number of children, number of family members, structure of family, duration of job as LHW, status of residence, daily travel, distance from BHU, previous status as village-based health worker, education of husband, family income, socioeconomic status within community.
- Level of work-related psychological distress as manifested by scores on SRQ-20 and Sources of Job Pressure and Job Satisfaction Scales of the OSInd
- Perceived job description was defined as the reported number of duties by the LHWs
- Actual job description was defined as the number of duties (i.e. 17) as given in official LHWs training manual.

Main outcome measures

Main outcome measures of the study were:

1. Sociodemographic profile of LHWs (age, marital status & level of education)
2. Level of work-related stress in married and un-married LHWs
3. Level of work-related stress in younger and older group of LHWs
4. Level of work-related stress in LHWs with reference to their education level.
5. Difference between perceived job description and actual job description of LHWs
6. Work-related problems of LHWs
7. Suggestions of LHWs for the improvement of their job description

Hypothesis

The study had following four hypotheses:

1. Married LHWs have less level of work-related stress as compared to un-married LHWs using SRQ scores
2. Younger age group of LHWs (20-35 years) has less level of work-related stress as compared to older group of LHWs (36-50 years)
3. LHWs with above Matric education have less level of work-related stress as compared to the LHWs with below Matric education
4. There is a difference between perceived and actual job description of LHWs.

This study was designed to fill the information gap about a vital cadre of primary health care workers of public health care system of Pakistan. Pioneering, insights offered by the finding of this study provide baseline information, on which, role of LHWs programme can be improved for quality service delivery for saving newborn lives in Pakistan. More specifically, the findings of the study are relevant for multiple stakeholders of primary public health care system including the policy makers; programme managers and newborn or child focused support organizations.

Methods

Study Area

The study was done in Tehsil Kahuta, a sub-district of Rawalpindi district, 60 Km southeast of Rawalpindi/Islamabad. Kahuta has an area of 1096Km², a population of 313200 and consists of four Administrative Circles (Government of Pakistan, 1999). The average household consists of 6.2 members. Most families depend on subsistence farming, supported by earnings of one or more of the adult male members serving in the armed forces or working as government employees, semi-skilled, or unskilled labourers in the cities. The study area typifies the state of under-development in most of South Asia's rural areas. Unemployment rates are estimated to be 36%, mainly due to the high population growth rate (2.7%), moderation in agriculture, and lack of non-agricultural jobs. Male and female literacy rates are 80% and 50% respectively. The infant mortality rate is 84 per 1000 live births. There are 20, basic health units and two rural health centers, consisting of 28 doctors, 12 midwives (female health visitors, providing obstetrical care), 15 vaccinators (providing immunization), and about 200 female primary health workers (Lead Health Workers - LHWs), providing mainly basic mother and child health care. There are a number of private medical practitioners in area including a range of qualified, semi qualified and unqualified Allopathic, Homeopathic and Unani Herbal (hakims) practitioners.

The study has been completed in total duration of 09 months (15th April 2003 to 31st January 2004)

Subjects and sampling

The current study was carried out in 15 randomly selected rural union councils (smallest rural administrative unit, each consisting of 5-12 villages) of a sub-district of Rawalpindi district. The sub district (Kahuta Tehsil) was selected randomly out of total six sub-districts of the Rawalpindi district. Then 15 union councils of the sub-district were also selected randomly out of total 20 union councils. Those union councils were excluded, which don not have LHWs coverage.

The LHWs sample comprised of all LHWs in the selected union councils, who were physically healthy (without any diagnosed or known chronic illness such as diabetes or cardio vascular disease), aged 18-50 years, based at their respective villages, married or un-married, having education ranging from grade 8 to 10 & above, willing to participate in the study and having at least one year of work experience as LHW. Total 150 LHWs were interviewed over a period of four months. .

The study was conducted according to good practice of research ethics. Informed consent was obtained from all the LHWs before conducting the interviews.

The study was primarily based on comparative cross sectional design. It was consisted of three sub-components (i) survey type investigation aimed at describing accurately the characteristics of the LHW specific beliefs, attitude and opinion related variables including sociodemographic profile, perceived job description and problems in performing MCH related duties. (ii) Comparison of naturally occurring variables of work-related stress with reference to LHWs age, marital status and level of education. (iii) Qualitative analysis of LHWs work-related and MCH related problems and their suggestions to improve their role as primary agent for mother and child health care.

The study primarily used three techniques for the process of data collection, which include questioner, interview and focus group discussion.

Descriptive qualitative sub-component was included as a part of the study to supplement the main quantitative aspect of the study. For this purpose six ‘focus group discussions’ (FGDs) were organized using a sub-sample of LHWs out of 150 interviewed LHWs. A professional short-term consultant facilitated the FGDs; who also performed content analysis of the qualitative data and generated a written report. The FGD is a type of group interview in which an interviewer asks questions to the group, and answers are given in an open discussion among the group members (13). Main objective of conducting these Focus Groups was to understand the role of LHWs play for providing maternal and newborn health care in their communities and also to have a deeper understanding of the problems they face related to their jobs. Attempts were also made to develop an insight in to the strategies for making the program more effective.

(FGD Report is attached as Appendix B)

Data ascertainment

Two experienced and trained research assistants interviewed the LHWs individually at their homes, designated as ‘Health Houses’. The interviews were conducted after high Inter-rater reliability had been established for all the study instruments during pre-testing, piloting procedure.

Assessment of mental distress and work-related stress

Stress was assessed as expressed in the form of psychological distress, using the Self-Reporting Questionnaire, briefly known as SRQ-20 (8). The SRQ is an instrument to identify mental distress including psychological and somatic symptoms in the general population. It is consisted of 20-items and yields yes/no answer. The SRQ has been translated, adapted and validated as culturally sensitive and effective instrument in Pakistan (11,12).

Further to supplement the SRQ-20, two additional scales namely sources of ‘ job pressure’ and ‘job satisfaction’ were also used. These scales were added to broaden aspects of LHWs work related stress. These two scales were translated, culturally adapted and pre-tested using a standard procedure (JPMA paper). Originally, ‘Occupational Stress Indicators (OSInd) was developed by Cooper, Sloan & Williams in 1988 (24).

Assessment of socio-Demographic variables

To collect data on fourteen relevant socio-demographic variables for the development of ‘sociodemographic profile of the LHWs’; a form was designed and pre-tested before the actual data collection process. The form was developed by adopting multiple methods, which include key informant interviews, preliminary interviews with LHWs and consultations with professional researchers/experts in the field.

Perceived job description & identification of LHWs problems

To collect data about the perceived job description and identification of LHWs problems, two open-ended questions were used. The questions were (i) what things you do for mother and child health care? (ii). What kind of problems do you face in performing your duties with reference to mother and child health care? The LHWs responses to these questions were recorded on a Performa for further content analysis.

While actual job description, related to mother and child health care of a trained LHW was adapted from the official training manual of National Family Planning & Primary Health Programme, Ministry of Health, Government of Pakistan. (Reference). According to the manual a trained LHW is supposed perform 17 different duties or activities related mother & child health care in the community. Hence, the number of perceived or reported activities is compared with the actual job description i.e. 17 activities.

Qualitative analysis of LHWs problems & suggestions

A trained short-term consultant was hired to facilitate six focus group discussions within the field area. A sub-sample of LHWs (N= 48) participated in the FGDs. An analytical report was produced highlighting LHWs problems and their suggestions to improve their role for mother and child health provision.

Data collection procedure

Both quantitative and qualitative approaches were used for data collection i.e. measurement of identified outcome measures.

The following sequential steps were followed for the systematic data collection:

1. Research Assistants (RAs) collected information about the selected study area including routes, roads, and relevant geographical orientation.

2. The RAs obtained lists of all working LHWs in the selected union councils from the concerned authorities, which included in charge medical officer of BHUs and LHWs supervisor.
3. Principal Investigator supervised the RAs during piloting and field-testing of the study instruments to establish inter-rater reliability.
4. The study instruments were modified as per experience of field-testing.
5. The RAs collected data from the LHWs after getting their informed consent.
6. The RAs collected data in a single visit to each LHW, including Sociodemographic variable, Self-Reporting Questionnaire, LHWs perceptions about their job description and problems, sources of job pressure and job satisfaction scales.
7. Six ‘focus groups’ were organized with subgroups of LHWs for the assessment of their work-related problems and practical suggestions to improve their job related efficiency/ quality with reference to MCH care. A short-term trained consultant facilitated the groups, who also produced standard report of the groups. The RAs assisted the organization of the groups within study area at health houses.
8. The collected data was coded and entered in a computerized database by an expert data controller/statistician.
9. A trained statistician performed the data analysis and generated outputs under the supervision of principal investigator.

Data analysis

The quantitative data was analyzed using Statistical Package for Social Sciences (SPSS 10.0).

Both ‘*inferential*’ statistical methods (t-test) and ‘*descriptive*’ statistical methods (summary tables, graphs, mean, percentages etc.) were applied to compare the groups of LHWs as per study hypothesis and appropriate presentation of the data.

‘*Inductive content analysis method*’ was used to analyze the qualitative data of the focus group discussions and an experienced short-term consultant generated relevant result categories.

Table: 1

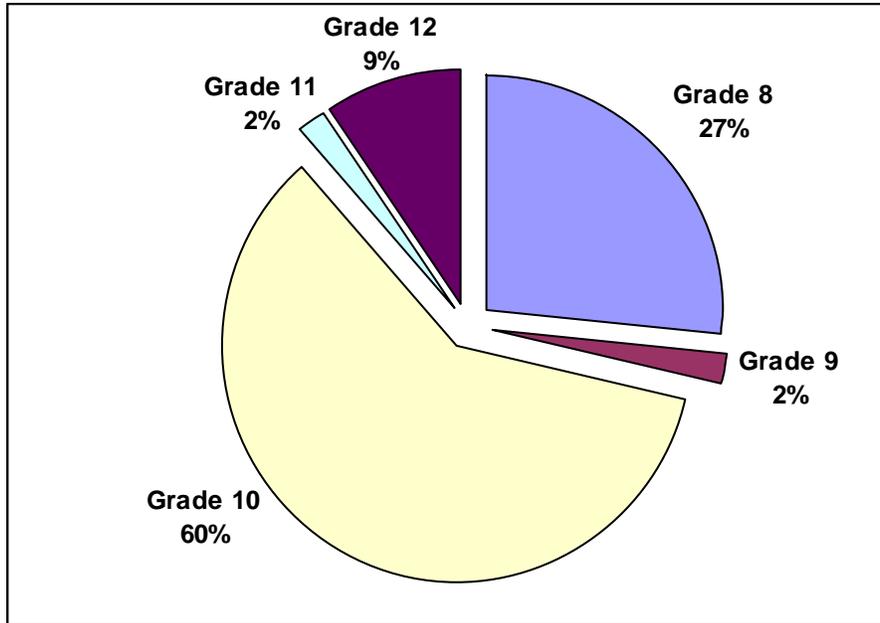
Summary Table of Socio-Demographic Variables

Demographic Variable	Mean	Standard Deviation	Rang
1. Age (Years)	34.31	7.15	19 – 50
2. No of Kids	3	2	0 – 8
3. No. Of Family Members	7	3	2 – 18
4. Duration of Job (Years)	4.12	2.83	1 – 9.09
5. Daily Travel (Km)	2.68	1.95	0.5 – 6
6. Distance from BHU (Km)	4.11	3.75	0.5 – 20.0
7. Family Income (Rs.)	4789.87	3292.55	1580 – 30000

N= 150

Table: 2

EDUCATION OF LHWs

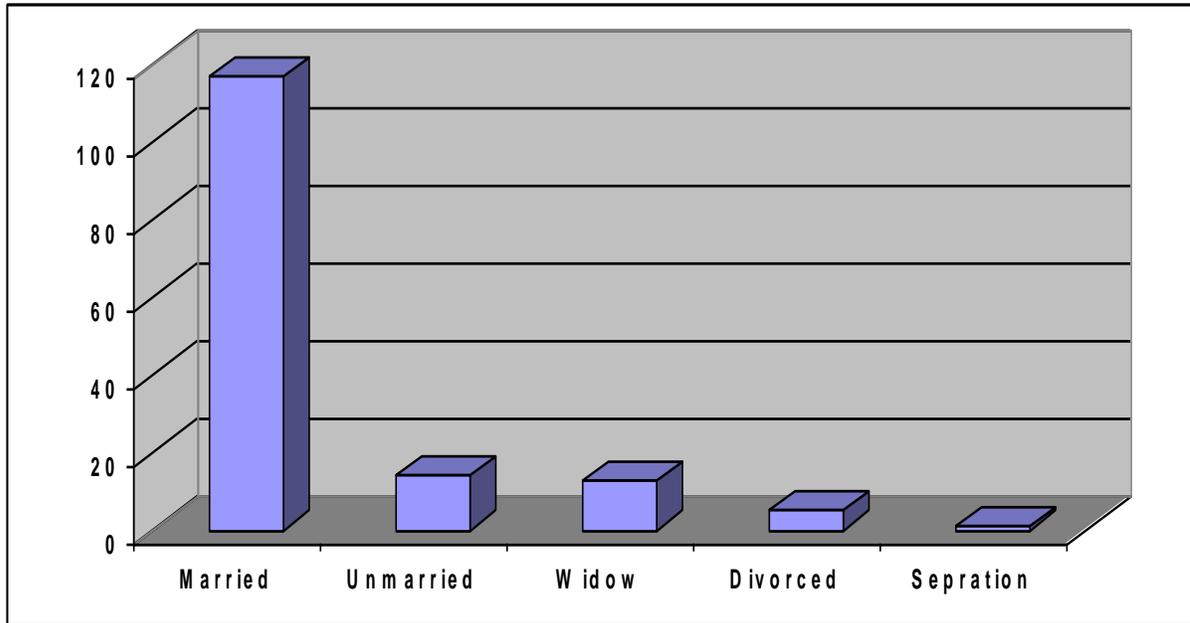


N= 150

- 60% LHWs are educated up to 10th grade
- 27% LHWs are educated up to 8th grade
- 2% LHWs are educated up to 9th grade
- 2% LHWs are educated up to 11th grade
- 9 % LHWs are educated up to 12th grade

Table: 3

MARITAL STATUS OF LHWs

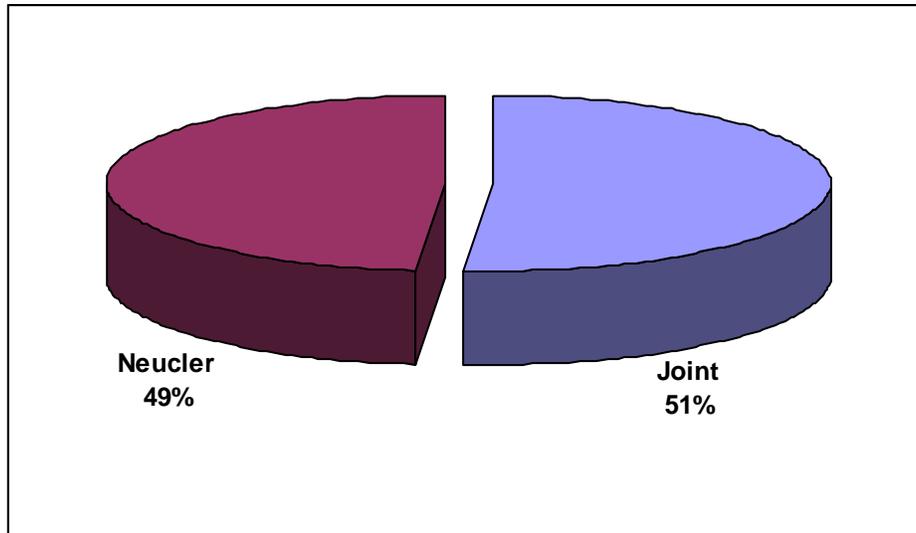


N= 150

- 177 LHWs are married
- 33 LHWs are single including unmarried, widows, divorced and separated.

Table: 4

FAMILY STRUCTURE OF LHWs

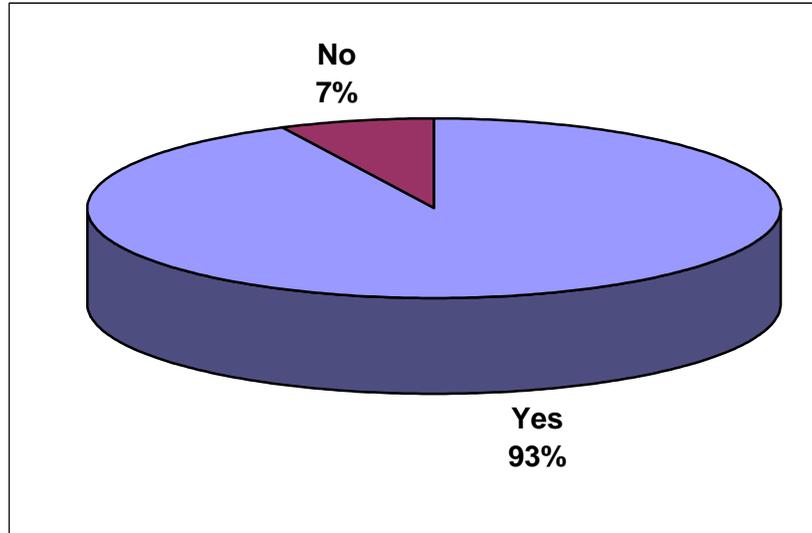


N= 150

- 51% LHWs belong to Joint families
 - 49 % LHWs belong to Neucler families

Table: 5

STATUS OF RESIDENCE WITHIN THE FIELD AREA

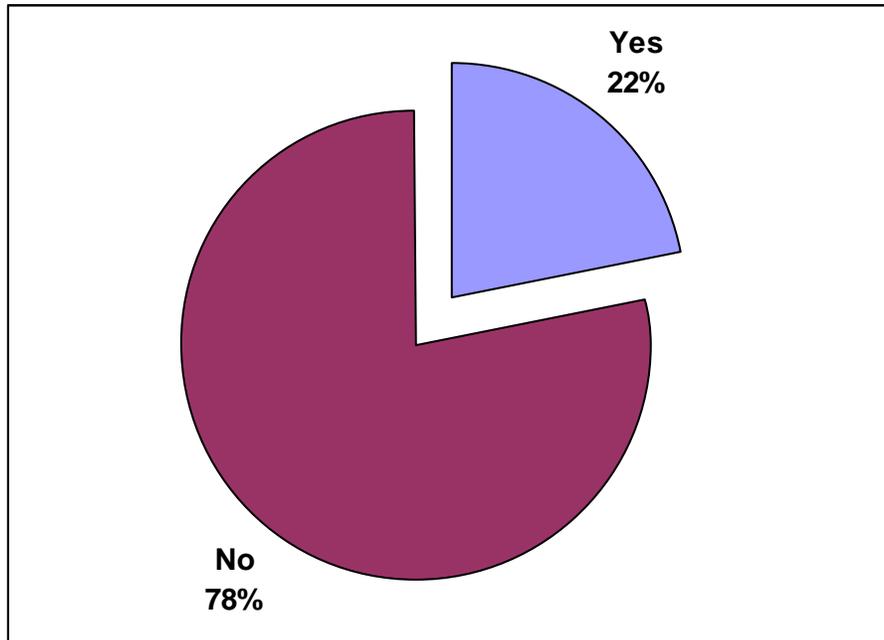


N= 150

- Only 7% LHWs live outside the field area of their duty.

Table: 6

PREVIOUS STATUS AS VBHW



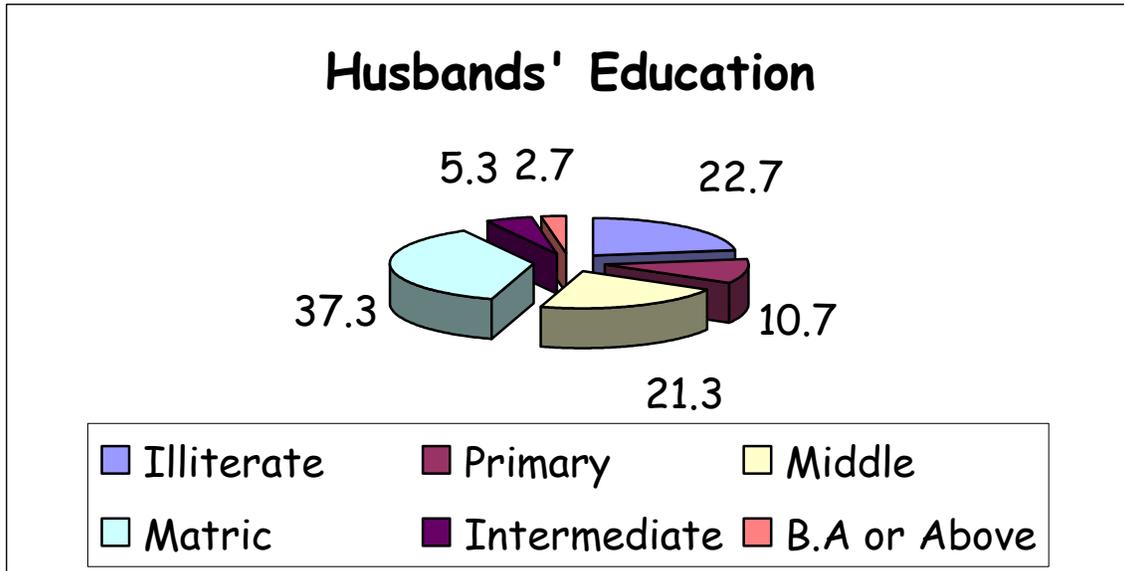
N= 150

- 22% LHWs have been previously Village Based Health Workers

Table: 7

•

LHWs Husbands' Education

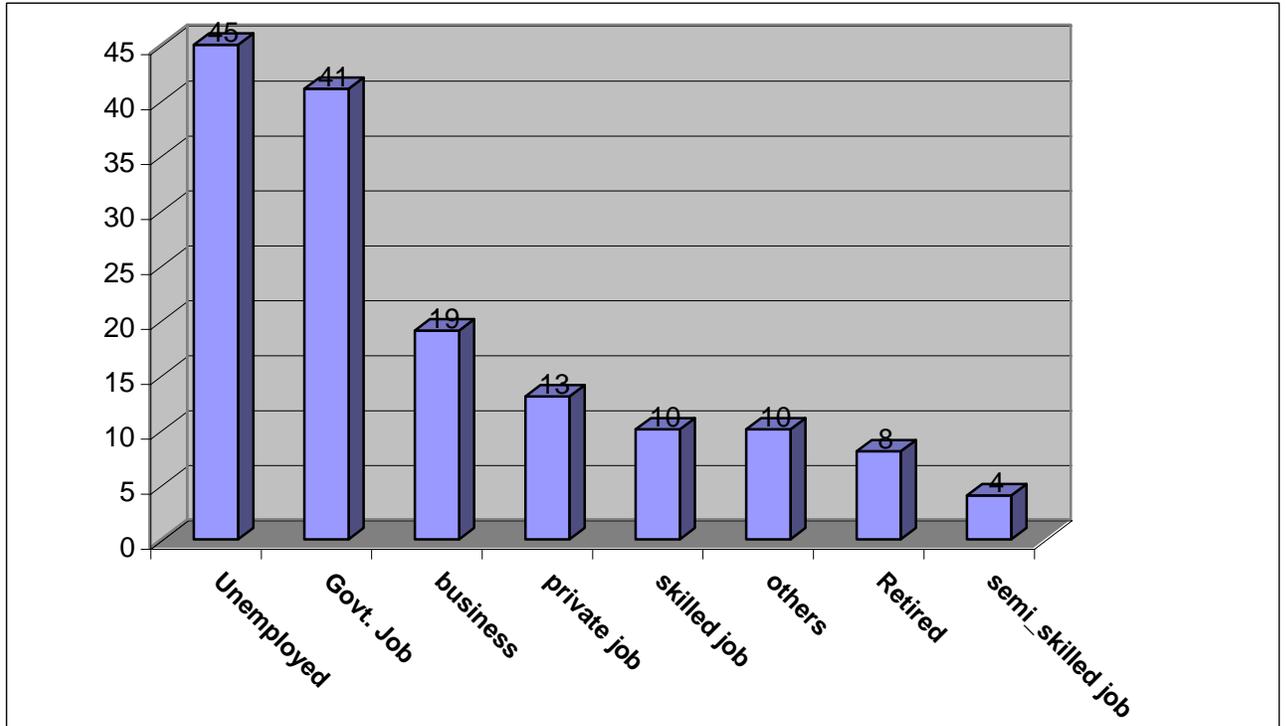


N= 150

- 37.3% are Matric Level
- 22.7 % are illiterate
- 21.3 are educated up to Middle Level
- 10.7 are educated up to Primary level
- 5.3 % are educated up to Intermediate level
- 2.7 % are educated up to B.A or above level

Table: 8

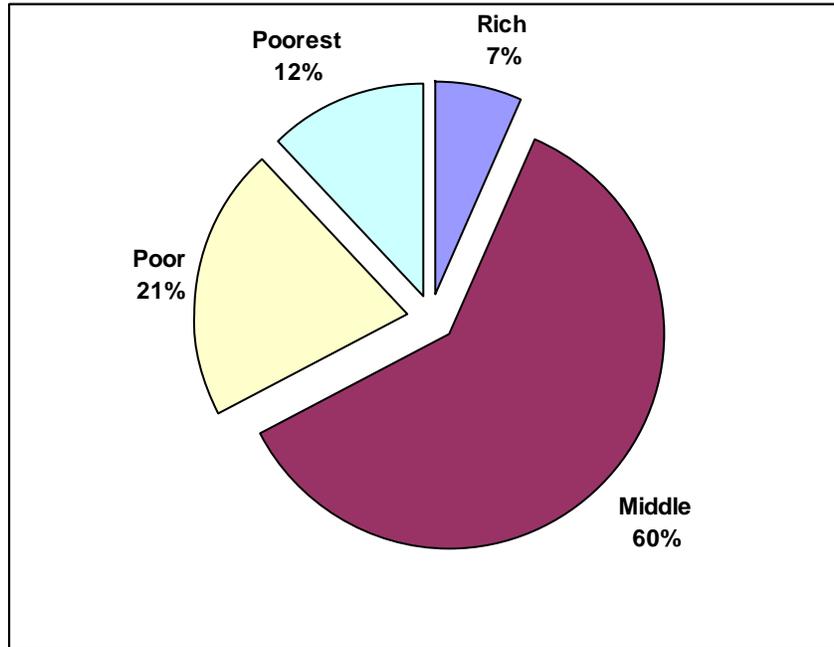
HUSBAND'S NATURE OF JOB



N= 150

Table: 9

SES OF LHW'S FAMILY



SES of LHWs based on the ratings of Key Informants and researchers in the context of local or village based socio – economic conditions

N= 150

OVERALL RESULTS OF THE LHWs SAMPLE

1. Summary Table of SRQ, SPJ and OSI Scores

N= 150	SRQ	SPJ	OSI
Mean	5.14	28.96	33.96
Std. Deviation	4.50	11.34	8.10
Range	19	52.00	40.0
Minimum	0	15.0	10.0
Maximum	19	67.0	50.0

SRQ= Self-Reporting Questionnaire, to assess work related mental distress

SPJ= Sources of Pressure on Job, to identify specific sources of pressure on job

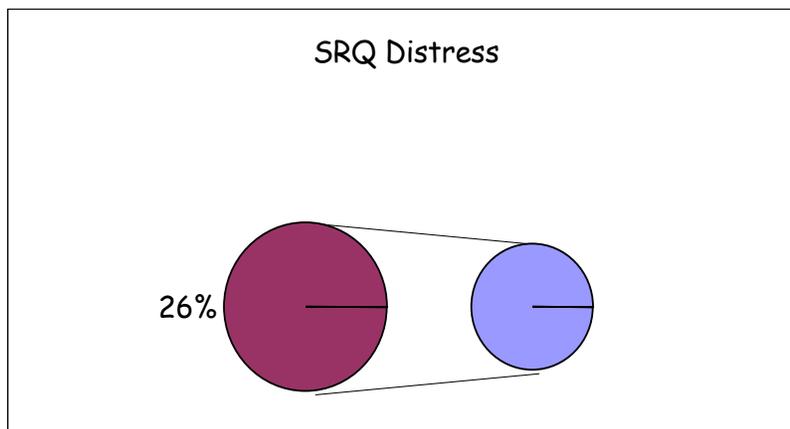
OSI= Occupational Stress Indicators, to assess level of job satisfaction

2. SRQ Scores as Indicator of Mental Distress in LHWs

A. Cut-Off Method:

(I) Taking 8 or > 8 score on SRQ as Cut-Off Point

No. Of LHWs having above Cut-Off Point Score = 39 (26 %)



B. Curve-Line Method

Mean SRQ score = 5.14 or 5 S.D= 4.50 or 4

Above 2 S.D = Extreme Distress > 13 SRQ Score

Above 1 S.D = High Distress b/w 9 -12 SRQ Score

No. Of LHWs having > 13 SRQ Score = 10 (6.66%)

No. Of LHWs having b/w 9 - 12 SRQ Score = 21 (14.0%)

3. SPJ Scores as Indicator of Job Pressure in LHWs

Curve-Line Method

Mean SPJ Score = 28.96 or 29.0

S.D= 11.35 or 11.0

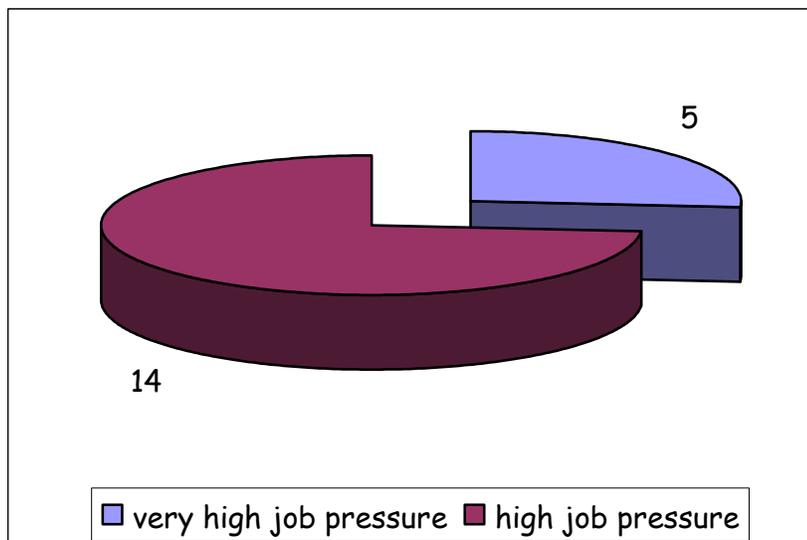
Very High Job Pressure: Above 2 S.D Score = i.e. > 51 SPJ Score

High Job Pressure: Above 1 S.D Score = b/w 40 & 50 SPJ Score

No. Of LHWs having 51 & > 51 SPJ Score = 8 (5%)

No. Of LHWs having b/w 40 & 50 SPJ Score = 21 (14%)

- 5% LHWs feel Very High job pressure
- 14% LHWs feel High Level job pressure
- Cumulative Percentage = 19%



4. OSI scores as Indicator of Job Satisfaction in LHWs

Curve-Line Method

Mean OSI Score = 33.96 or 34

S.D= 8.10 or 8.0

Very High Job Satisfaction: Above 2 S.D Score = 50 & > 50 OSI Score

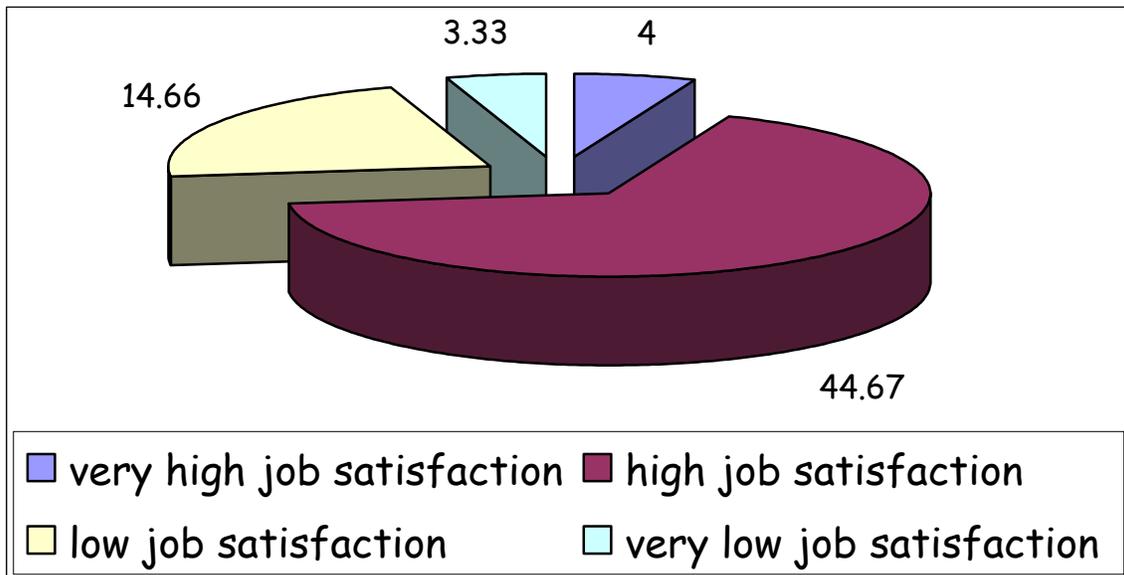
High Job Satisfaction: Above 1 S.D Score = b/w 34 & 49 OSI Score

No. Of LHWs having 50 or > 50 OSI Score = 6 (4%) Very Highly Satisfied

No. Of LHWs having scores b/w 34 & 49 OSI Score = 67 (44.67%) Highly Satisfied

No. Of LHWs having scores b/w 26 & 19 OSI Score = 22 (14.66%) Low satisfaction

No. Of LHWs having scores b/w <18 OSI Score = 5 (3.33%) Very Low satisfaction



5. Correlation Among SRQ, SPJ and OSI

	SRQ
OSI	- 0.178*
SPJ	0.219**

* $p < 0.5$ ** $p < 0.01$

(Spearman's Correlation Coefficient)

Primarily, three questionnaires were used, as given below:

1. SRQ= Self-Reporting Questionnaire, to assess work related mental distress
2. SPJ= Sources of Pressure on Job, to identify specific sources of pressure on job
3. OSI= Occupational Stress Indicators, to assess level of job satisfaction

The results have some type of correlation or interdependence with each other

- There is positive correlation ($r = 0.219$) between SRQ and SPJ, which means that if, there is a rise in mental distress then there is a rise in job pressure also or vice versa.
- There is negative correlation ($r = - 0.178$) between SRQ and OSI; which means that if there is rise in mental distress then is decline in job satisfaction or vice versa.

COMPARISON OF LHWS SUB-GROUPS

1. Comparison of work related stress (SRQ) & Sources of Pressure on Job (SPJ) Between Younger LHWs Group and Older LHWs Group

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Younger Group of LHWs (19-35 years) N= 86		Older Group of LHWs (more 35 years) N= 64		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	4.57	3.71	5.91	4.92	1.897	0.060
SPJ	29.13	11.07	28.73	11.79	0.209	0.834

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

2. Comparison of work related stress (SRQ) & Sources of Pressure on Job (SPJ) Between Above Matric LHWs Group and Below Matric LHWs Group

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Educated Up to 9 Grade N= 43		Educated > 9 Grade N= 107		t- value	p – value
	Mean	S.D	Mean	S.D		
	SRQ	5.42	4.64	5.03		
SPJ	28.83	12.20	29.00	11.03	0.084	0.933

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

3. Comparison of work related stress (SRQ) & Sources of Pressure on Job (SPJ) Between Married LHWs Group and Single LHWs Group

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Married LHWs		Single LHWs		t- value	p – value
	N= 117		N= 33			
	Mean	S.D	Mean	S.D		
SRQ	4.85	4.15	6.18	4.66	1.582	0.116
SPJ	29.82	11.85	25.87	8.80	1.779	0.077

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

**4. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ)
Between LHWs having up to 3 and more than 3 Kids**

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to 3 Kids		More than 3 Kids		t- value	p – value
	N= 83		N= 67			
	Mean	S.D	Mean	S.D		
SRQ	4.95	4.06	5.37	4.61	0.595	0.553
SPJ	28.75	10.78	29.20	12.07	0.241	0.810

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

**5. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ)
Between LHWs having Family Members up to 6 and more than 6**

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to 6 Members		More than 6 Members		t- value	p – value
	N= 70		N= 80			
	Mean	S.D	Mean	S.D		
SRQ	5.30	4.34	5.0	4.29	0.425	0.672
SPJ	28.48	10.22	29.37	12.23	0.478	0.634

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

6. Comparison of stress (SRQ) and Sources of Pressure on Job Between LHWs having Joint and Nuclear Family Structure

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to 6 Members		More than 6 Members		t- value	p – value
	N= 77		N= 73			
	Mean	S.D	Mean	S.D		
SRQ	4.68	4.61	5.63	3.93	1.362	0.175
SPJ	29.42	12.28	28.46	10.32	0.518	0.605

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

7. Comparison of Stress (SRQ) and Sources of Pressure on Job (SPJ) Between LHWs having work experience up to 4 years and More than 4 years

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to 4 years		More than 4 years		t- value	p – value
	N= 73		N= 77			
	Mean	S.D	Mean	S.D		
SRQ	4.73	4.35	5.53	4.25	1.148	0.253
SPJ	28.20	10.97	29.67	11.71	0.792	0.430

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

8. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ) Between LHWs living within field area and LHWs Living outside field area

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Living Within Field Area N= 139		Not-Living Within Field Area N= 11		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	5.09	4.32	5.73	4.31	0.469	0.640
SPJ	28.92	11.19	29.36	13.75	0.122	0.903

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

**9. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ)
Between LHWs Daily Traveling up to 2 Km and More than 2 Km**

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to 2 Km N= 7		More 2 Km N= 4		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	3.29	2.36	10.0	3.56	3.802	0.004
SPJ	27.57	12.23	32.50	17.63	0.551	0.595

d.f: 9

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

- I. We reject Null Hypothesis and accept Alternative Hypothesis for SRQ, which means that there is statistically significant difference between the means of two groups.
- II. We accept Null Hypothesis for SPJ, which means that there is no statistically significant difference between the means of two groups.

**10. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ)
Between LHWs Having Distance from BHU Up to 3 Km and More
than 3 Km**

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to 3 Km N= 96		More than 3 Km N= 50		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	4.93	4.20	5.52	4.58	0.785	0.434
SPJ	27.20	11.51	32.28	10.50	2.602	0.010

d.f: 144

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

- I. We accept Null Hypothesis for SRQ, which means that there is no statistically significant difference between the means of two groups.
- II. We reject Null Hypothesis and accept Alternative Hypothesis for SPJ, which means that there is statistically significant difference between the means of two groups.

**11. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ)
Between LHWs Previously VBHW and LHWs**

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Have Been VBHW N= 33		Not Have Been VBHW N= 117		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	4.79	4.87	5.24	4.15	0.531	0.596
SPJ	29.39	12.35	28.83	11.09	0.248	0.804

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

We accept Null Hypothesis, which means that there is no statistically significant difference between the means of two groups both for SRQ and SPJ.

12. Comparison of stress (SRQ) and Sources of Pressure on Job (SPJ) Between LHWs Having Family Income Up to Rs. 4000 and More than Rs. 4000 per month

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Up to Rs. 4000 N= 84		More than 4000 N= 66		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	6.14	4.65	3.86	3.45	3.326	0.001
SPJ	28.96	11.67	28.95	10.99	0.005	0.996

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

- I. We reject Null Hypothesis and accept Alternative Hypothesis for SRQ, which means that there is statistically significant difference between the means of two groups.
- II. We accept Null Hypothesis for SPJ, which means that there is no statistically significant difference between the means of two groups.

13. Comparison of Stress (SRQ) and Sources of Pressure on Job (SPJ) Between LHWs Who Belongs Rich SES and Poor SES Group

Consolidated Table for Independent Samples Test: t-test for Equality of Means

	Rich SES N= 101		Poor SES N= 49		t- value	p – value
	Mean	S.D	Mean	S.D		
SRQ	4.19	3.81	7.10	4.63	4.089	0.000
SPJ	28.61	11.14	29.67	11.82	0.535	0.593

d.f: 148

Null Hypothesis:

There is no difference between the means of the two samples

Alternative Hypothesis:

There is a difference between the means of the two samples

Decision:

I. We reject Null Hypothesis and accept Alternative Hypothesis for SRQ, which means that there is statistically significant difference between the means of two groups.

II. We accept Null Hypothesis for SPJ, which means that there is no significant difference between the means of two groups.

Categories of Perceived Job Description By LHWs

SNO	Categories	Frequency
1	Provide advice about expecting mothers health e.g. importance of folic acid	126 (84%)
2	Provide advice about the importance of breast-feeding	135 (90%)
3*	Keep records of i.e. Health Information System	150 (100%)
4	Provide advice about vaccination of expecting mothers i.e. tetanus oxide	116(77%)
5	Provide vaccination to the infant i.e. EPI	126(84%)
6	Provide advice and information about good diet for the infant	81 (54%)
7	Provide advice and information about balance diet for mothers at antenatal and postnatal level	45(30%)
8*	Provide advice about to the community about general cleanliness and hygiene	87(58%)
9*	Provide guidance and advice regarding family planning	83 (55%)
10	Perform weighing of infant at birth and later	83 (55%)
11	Advise not give traditional “ghutti” to the infant instead of colostrums	7(5%)
12	Advise for safe delivery by LHV/TBA/Doctor	21(14%)
13	Refer or take pregnant women to BHU	87(58%)
14	Advise about the use of Iodine salt	12(8%)
15	Perform weighing of pregnant women	32(21%)
16*	Refer TB cases to BHU	4(3%)
17*	Advise about cleaning the well-water	4 (3%)

- These categories are not directly related to MCH care

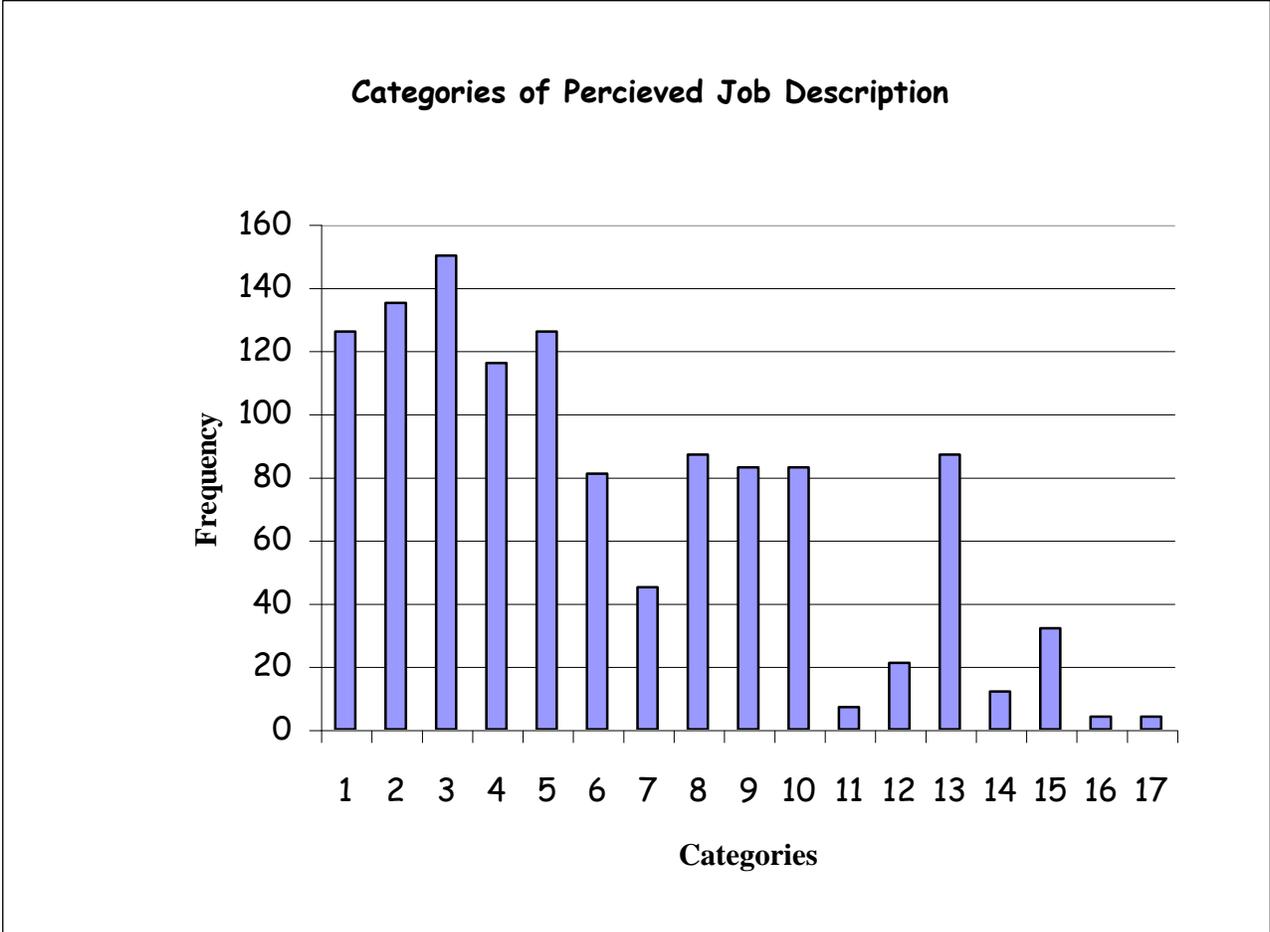
No. Of Actual MCH care related activities: 17

(Please see annexure for the details of actual job description)

Mean of Reported Activities: 7.29
 Standard Deviation: 1.97
 Range: 12
 Minimum: 2
 Maximum: 14

Conclusion:

There is a marked difference between the LHWs perceived or reported job description and their actual job description as given in their training manual.



- Graphical presentation of the LHWs perceived or reported job description, indicates that some activities tend to be perceived more as compared to certain other activities, which may be relevant for future training of LHWs as well as for MCH focused programme implementation.

Categories of Reported Problems by LHWs

NO	Categories	Frequency/ %
1	Face difficulties from community regarding family planning advice	30 (20%)
2	Face family problems due field work	13 (8.66%)
3	Face problems due to wastage of time in official meetings	2 (1.33%)
4	Face problems due to less and irregular availability of medicines	103 (68.66%)
5	Salary is inadequate/less and given irregularly	91 (60.66%)
6	Face problems due to illiteracy of community	11 (7.33%)
7	Problems during EPI campaigns due people's avoiding behavior	36 (24%)
8	Problems due to inadequate skills for ante-natal care	7 (4.66%)
9	Official pressure to bring cases for family planning operations	15 (10%)
10	Problems due to distance from BHU	5 (3.33%)
11	Problems in weighing new born baby	17 (11.33%)
12	Problems due to misbehavior and devaluation by the community	3 (2%)
13	Problems due to female gender	4 (2.66%)
14	Problems due to non-availability of mothers at home	9 (6%)
15	Problems due to inadequate transport facilities	17 (11.33%)
16	Problems due to inadequate availability of necessary material such as chart, calendars, weighing machines, thermometers, BP apparatus	29 (19.33%)
17	Problems due to being unmarried	3 (2%)
18	Problems due to community's non cooperation	33 (22%)
19	Problems due to hurdles from men and older women	12 (8%)
20	Problems due to excessive work load e.g. duty in additional areas	15 (10%)
21	Problems due to no TA/DA for training and meetings	17 (11.33%)
22	Problems due to repeated calls from BHU	14 (9.33%)
23	Problems due to misbehavior of BHU staff	5 (3.33%)
24	Problems due to inadequate availability of registers	5 (3.33%)

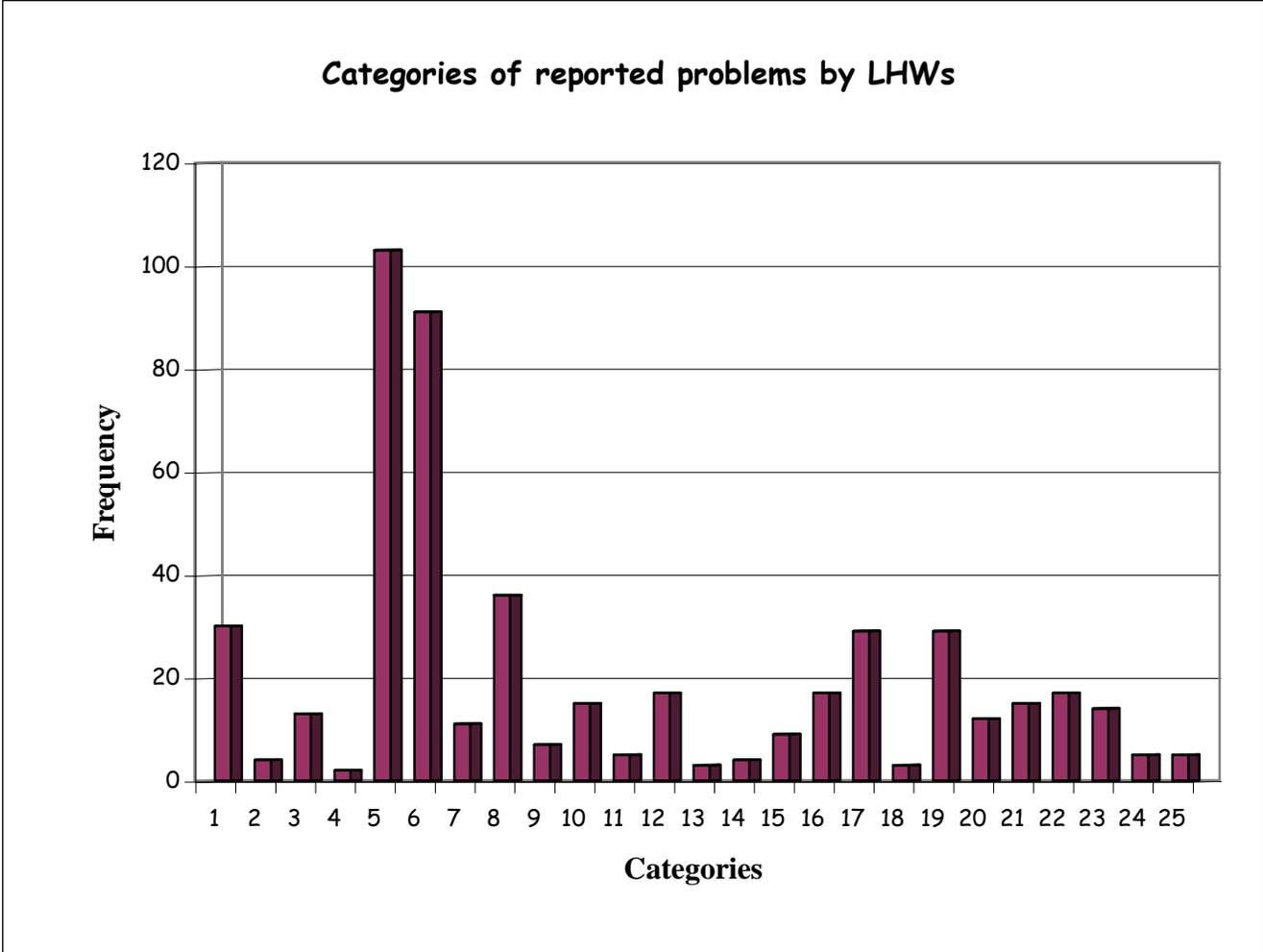
Mean= 3.5

S.D= 1.74

Range= 8

Minimum= 0

Maximum= 8



- Graphical presentation of the LHWs reported problems indicates the comparison of most important problems and less important problems from the LHWs point of view. This picture may be relevant for future initiatives to enhance the effectiveness and efficacy of LHWs.

Sources of Pressure in Job for LHWs

Item-Analysis of SPJ

No	Categories	Very Little	Little	Moderate	Much	Most
1.	Having too much work to do.	53 (35%)	29 (19%)	52 (34%)	10 (6%)	6 (4%)
2.	Lack of control and influence.	59 (39%)	31 (20%)	29 (19%)	20 (17%)	5 (3%)
3.	Inadequate guidance and backup from superiors.	76 (50%)	38 (25%)	31 (20%)	3 (2%)	2 (1%)
4.	Ambiguity in the nature of job role.	80 (53%)	31 (20%)	25 (16%)	9 (6%)	5 (3%)
5.	Time spent in attending meetings.	77 (51%)	32 (21%)	27 (18%)	10 (6%)	4 (2%)
6.	Spouse/family's attitude towards job and career.	99 (66%)	20 (13%)	19 (12%)	10 (6%)	2 (1%)
7.	Departmental covert discrimination and favoritism.	90 (60%)	21 (14%)	28 (18%)	8 (5%)	3 (2%)
8.	Being undervalued by the department	81 (54%)	32 (21%)	16 (10%)	14 (9%)	7 (4%)
9.	No appreciation of work by community	98 (65%)	28 (18%)	19 (12%)	4 (2%)	1 (0.7%)
10.	Working with the opposite sex.	84 (56%)	31 (20%)	12 (8%)	8 (5%)	15 (10%)
11.	Factors not under direct control.	78 (52%)	26 (17%)	22 (14%)	14 (9%)	10 (6%)
12.	Absence of potential career advancement.	52 (34%)	19 (12%)	24 (16%)	25 (17%)	30 (20%)
13.	Personality clashes with coworkers	99 (66%)	22 (14%)	16 (10%)	10 (6%)	3 (2%)
14.	Pursuing a career at the expense of home life.	84 (56%)	30 (20%)	21 (14%)	10 (6%)	5 (3%)
15.	Too much paper work	73 (48%)	35 (23%)	22 (14%)	12 (8%)	8 (5%)

Item-wise analysis of Sources of Pressure on Job (SPJ), gives detailed picture of the intensity of various sources of pressure as perceived by the LHWs

Job Satisfaction Among LHWs

Item-Analysis of OSI

No	Categories	Very Little	Little	Moderate	Much	Most
1.	Level of Job satisfaction	15 (10%)	12 (8%)	58 (38%)	31 (20%)	34 (22%)
2.	Job as sources of motivation for progress	10 (12%)	32 (21%)	35 (23%)	31 (20%)	33 (22%)
3.	Level of satisfaction for professional development	31 (20%)	26 (17%)	43 (28%)	26 (17%)	24 (16%)
4.	Level of job security	24 (16%)	22 (14%)	44 (29%)	23 (15%)	37 (24%)
5.	Level of satisfaction with supervisor's style	12 (8%)	4 (2%)	24 (16%)	46 (30%)	64 (42%)
6.	Satisfaction with impression within community	9 (6%)	7 (4%)	31 (20%)	54 (36%)	49 (32%)
7.	Satisfaction with the amount of salary	65 (43%)	26 (17%)	29 (19%)	14 (9%)	16 (10%)
8.	Satisfaction with amount of work	20 (13%)	16 (10%)	32 (21%)	43 (28%)	39 (26%)
9.	Satisfaction with administrative structure	21 (14%)	16 (10%)	61 (40%)	29 (19%)	23 (15%)
10.	Satisfaction with professional skills	10 (6%)	5 (3%)	45 (30%)	35 (23%)	55 (36%)

- Item-analysis of Occupational Stress Indicators, which assesses level job satisfaction, gives a clear picture of those aspects that are considered as sources of job satisfaction by the LHWs

Problems Identified in Focus Groups

Personal Problems	<ol style="list-style-type: none"> 1. Work Load 2. Distance 3. Lack of own Health problems & care
Professional Problems	<ol style="list-style-type: none"> 1. Lack of quality of training 2. Less availability of medicines 3. Lack of equipments 4. Logo of family planning on the medicine 5. Identification & search for TB cases 6. Unwanted/illegitimate pregnancies 7. Involvement in polio campaign 8. Lack of transport facilities for the patients 9. Conflict with local Dayees (TBAs)
Economic Problems	Less amount and irregular payment of the salary
Social Community Side	<ol style="list-style-type: none"> 1. Non-cooperation by the community 2. Women do not want to spare time for LHWs 3. Over expectations by the community
Gender Related Problems	Less acceptance due to female gender

Identified Local - Traditional Practices Related to Newborn Care

NO	Practices
1.	People are reluctant to register the names of newborn with LHWs (“nazar lag jaey gi”)
2.	Some resist the immunization. (“ <i>ham ney bhi tou yeah teekea nahi lagwayee thhey. Allah hifazat karta hai</i> ”)
3.	Injections to pregnant women may be a danger for miscarriage
4.	Some Resist the advice for colostrums. (“ <i>bachai ki bhoke kai liay yeh dooad kafi nahian hoota</i> ”)
5.	Some families do not allow breastfeeding initially. After six seven days the <i>Nand</i> squeezes away all the milk, washes the breast of the <i>Bhabi</i> thoroughly, than ask for money (gift, treat) (<i>chchajj main paisay dalti haiy</i>) and then would let the child drink milk.
6.	Mothers do not get proper nutritional diet, especially after second or third delivery.
7.	Some families give heavy and nutritional diet (halwa, desi ghee) to the <i>zachcha</i> ; not for her health and strength, but for the sake of child.
8.	Repeated pregnancies. Some families have even up to 10 kids with a difference of about one year in between.
9.	One lady quoted a case in, which a women while talking against tuballigation, mentioned that because she went through the operation, therefore all the kids she previously had died.
10.	During loose motions they stop giving food and liquid to the child
11.	No special diet for kids. Generally they give lesser quantity of the adult food to children because they are small in size.
12.	Mentioned that in the area they assume that the child suffers from a special disease called “ <i>Malli</i> ”; new born child have small spots on the body, looks very fat (healthy) or have a reddish complexion. Such infants are taken to a specific doctor, who claims that he has discovered a vaccine for such problem.
13.	Sometimes women get fits during or after delivery. (Remedy is to make the room dark or put off the lights then the fits stop)
14.	Grandmothers insist on giving “ <i>ghutti</i> ”, it cleans the stomach. The “ <i>ghutti</i> ” is made of “ <i>Desi ghee</i> ” and “ <i>Ajawaayn</i> ” (A number of LHWs were also not sure why should <i>ghutti</i> not be given)..
15.	Many mothers use feeding bottle, but don’t keep it clean. Some claim that they boil the bottles, but flies are seen all around and these bottles are hardly protected from these flies.
16.	The <i>zachcha</i> has a privilege of having physical massage for a couple of weeks from a <i>dayee</i> or an old lady from the community.
17.	Putting the child under the rays of the sun during early hours of morning treats neo-natal jaundice. Some seek out “ <i>Damm</i> ” and <i>Taaweez</i> .”
18.	In case they do not have any child they would like to have a baby boy or if they previously have a number of girls (even one) they would aspire for a baby boy.
19.	Pay more to the doctor/ <i>dayee</i> (or they demand more) if the baby is a boy.
20.	Distribute sweets only on the birth of a baby boy.
21.	On the birth of the boy they will happily say “ <i>Hamara waris paida hogaya</i> ” not the mother’s.
22.	Give more and better food to the boy child as compared to girl child. The justification is given that in future he has to do hard jobs.

23.	Some seek out various “ <i>totkay</i> ” for having a baby boy.
24.	Some people believe that if the would be mother drinks the milk of a cow who recently has had a calf (male), she will give birth to a baby boy
25.	One participant narrated the incidence in which one <i>peerni</i> (wise-women) asked the client women to attempt to catch the <i>laddoo</i> from her. If she succeeds she will get pregnant.
26.	Another woman quoted an incidence in which the <i>Saas</i> of the would-be mother went to a <i>Ziarat</i> for the <i>Duaa</i> and the daughter-in-law gave birth to baby boys three times consecutively.
27.	Some people don’t let meet their pregnant daughter/in-law, or to get hold of the newborn child by a childless women.
28.	It is believed that when the child is circumcised one should not go in his room with wet hairs.
29.	Usually don’t give bath to newborns frequently during winters. Hot water is obtained after much efforts and bathing of the child is not on priority.

LHWs Suggestions for Improvement

<p style="text-align: center;">Administrative Structure</p>	<ol style="list-style-type: none"> 1. System of salary distribution should be strictly on monthly basis. 2. Pay should not go to the banks directly; rather cheques should be given. 3. The LHWs should sign separately for each month's salary cheque. 4. Communication between their Banker and the official should be improved.
<p style="text-align: center;">Training Related</p>	<ol style="list-style-type: none"> 1. More extensive training like measuring blood pressure, to administer drip, basic tests of urine and blood, and prenatal check-ups. 2. Training of assisting in deliveries and to learn about the handling of expected problems in deliveries.
<p style="text-align: center;">Salary</p>	<p>The salary is very low. It should be at least Rs.2000 per month.</p>
<p style="text-align: center;">Effective Delivery of Health Education and Motivation</p>	<p>No suggestion. It was felt that due to long distances they avoid going to the periphery of the assigned target population.</p>
<p style="text-align: center;">Reduction in Child Mortality</p>	<ol style="list-style-type: none"> 1. Expected mothers should go for regular check-ups. 2. Mother should be trained to breast-feed the child in early months as frequently as possible. 3. Should keep the child warm, especially in winter.
<p style="text-align: center;">Immunization of the Child</p>	<p>The participants were satisfied on the situation of the immunization of children in their community. Still they mention few stubborn cases that would give plea that the child is having some Homeopathic treatment and it would have a clash between the two systems of treatments.</p>

Conclusion

To our knowledge, this is the first effort to study role of LHWs for the provision of maternal and newborn health care, focusing LHWs work-related stress, perceived job description and problems.

Broadly, the study was focused to understand personal efficiency and quality of service delivery by LHWs. It was aimed at to understand those factors, which might be responsible for the variable success or performance of LHWs under 'National Family Planning and Primary Education Programme'. It is particularly important to mention here that the SNLI has identified the LHWs as one of the key stakeholders in public sector for the achievements of its objectives in Pakistan. The findings of the study will help to identify those areas of concern, which are of common interest, and cooperation for all stakeholders; who are interested to strengthen quality service delivery at primary level health care through utilizing the LHWs as a prime 'service delivery agent'. In this backdrop, we may discuss the findings of study as per the originally conceived objects of the study.

Socio-Demographic Profile of the LHWs

Information on fourteen different socio- demographic variables was collected. This information gives a clear picture of actual situation of LHWs. This demographic profile highlights the break down of all variables including education, age, marital status, numbers of kids, number of family members, structure of family, daily travel within field area, distance from 'basic health unit' and socio-economic status of a LHW in the community. All these aspects are very much relevant with the selection criteria and actual performance of a trained LHW for service delivery. These variables have also been used to compare level of work related stress in the LHWs

Level of work related stress in the LHWs

The findings of the study suggest that about quarter (26%) of the LHWs have some kind of work related stress as indicated by their mental distress. Similarly, about 19% LHWs feel some sort of pressure in performing their duties. However, it is interesting to note that majority of the LHWs has job satisfaction of variable degree.

Who are those LHWs, which have work related stress and pressure on job? The findings suggest that there are certain variables (i.e. socio-economic status, level of family income, amount of daily travel within field area & amount of distance from the BHU), which increase vulnerability of a LHW for work related stress.

The LHWs who have lower socio-economic status as per local standards, they have more work related stress as compared to those LHWs, who belong to an upper socio-economic status within community. Similarly, LHWs whose family income is up to Rs. 4000 per month have more work related stress as compared to those LHWs whose family income is more than Rs. 4000 per month.

The LHWs who daily travel more than 2 Km within field area have more work related stress and job pressure as compared to those LHWs who daily travel up to 2 Km within field area. The LHWs who are based more than 3 Km away from the concerned BHU have more work related stress and job pressure as compared to those LHWs who are based within 3 Km radius of the concerned BHU.

According to the finding of the study, other socio-demographic variable including age, education and marital status of the LHWs do not make any difference with reference to their level of work related stress and job pressure. It is important to note that originally, it was hypothesized that these three variables would affect the level of work related stress.

Difference between Perceived job description and actual job description

The LHWs were asked an open ended question, what things you do for mother and child health care? Their responses were numbered and descriptive categories were generated to compare them with their actual job description. The actual job description was adopted from LHWs official training manual. According to the actual job description there are 17 different activities, the LHWs are supposed to perform for the provision of mother and child health care at primary level. Analysis of the reported job description indicates that a LHW perform only 7 duties on average. Further, there is no uniformed pattern of perceived job description rather some duties are perceived more and some are perceived less e.g. keeping records is the most perceived duty. It is important to note that the duties related to newborn care are less perceived as compared to duties, which are related to family planning, health information system and general health education.

Work related problems of the LHWs

The LHWs were also asked an open-ended question, what kind of problems do you face in performing your duties with reference to mother and child health care? Their responses were categorized for further content analysis. Main identified problems are including low & irregular disbursement of salary, inadequate provision of medicines & material, low quality training and problems from the community side.

Suggestions of the LHWs for improvement

Focus group discussions with LHWs provide a rich qualitative data about in depth analysis of their problems, prevalent local practices related to newborn care and suggestions to improve the job description of LHWs. The LHWs provided detailed list of suggestions for improvement categorized as administrative, training related and others. This list provides valuable sources for the improvement of LHW programme, especially with reference to newborn care.

The LHWs also provided a detailed list of local beliefs and practices related to newborn care. This valuable asset may be very crucial for the concerned stakeholders for planning and implementing any newborn focused programme.

Recommendations:

Considering the findings of this study the following recommendation can be made for the stakeholders, who are concerned with the provision of mother and child health care at primary level, utilizing the services of LHWs. These recommendations should be kept in mind both at planning and implementation level of any relevant programme. The recommendations are focused to improve the quality of service delivery through LHWs.

1. Quality training-skills development programmes for the LHWs focusing newborn care should be initiated at Union Council, Tehsil and District level.
2. LHWs work related stress and pressure of job should be managed through improving problematic administrative patterns, particularly improving salary structure and its regular disbursement; providing adequate medicines and materials; improving selection criteria for the LHWs.
3. Joint programmes should be initiated to improve performance of LHWs role in newborn care.
4. Indicators for the work related stress and performance should be developed for regular monitoring and evaluation of LHWs.
5. Procedural intervention checklist about newborn care should be developed for LHWs and they should be trained accordingly.

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