



## The Role of the District Public Health Nurses: A Study from Gujarat

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### Abstract

*The role of District Public Health Nurses (DPHN) and District Public Health Nurse Officers (DPHNOs) as supervisors of the Public Health nursing and midwifery staff in a district was investigated. Thirteen DPHNs and DPHNOs from six districts selected from six geographic zones of Gujarat were observed for one week using the time motion method. Their activities and time spent were noted and the DPHNs/DPHNOs and their supervisors were interviewed.*

*The role of the DPHNs has reduced over the years because they have not been assigned new roles with change in programmes and policies. Most of the DPHNs have training for clinical work in hospitals. Their 10 month training to qualify for PHN is inadequate to develop knowledge and skills in public health. There is a gap between their training and posting due to delays in government procedures of promotion. The DPHN/DPHNOs spend majority of their time in the office (49%) where they have a limited role. Their supervisory role for nurses and midwives has lost its importance. They spend about 1/3<sup>rd</sup> of their time in field supervision mostly visiting centres accessible by public transport as they do not have an allotted government vehicle. As they do not submit any field report, there is no follow-up action from their visit. Nevertheless they seem to have an important role in solving problems of field workers as they are mediators between the district and peripheral facilities. To conclude the DPHNs are under utilized which affects the quality of maternal and child health services in the district.*

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## List of Abbreviations

ADHO	Additional District Health Officer
ANM	Auxiliary Nurse Midwife
ANS	Academy of Nursing Studies
APHA	American Public Health Association
ASHA	Accredited Social Health Activist
BHV	Block Health Visitor
CDHO	Chief District Health Officer
CHCs	Community Health Centres
DPHN	District Public Health Nurse
DPHNO	District Public Health Nurse Officer
DPMU	District Project Management Unit
DTT	District Training Team
EmOC	Emergency Obstetric Care
FHS	Female Health Supervisor
FHW	Female Health Worker
GNM	General Nursing Midwifery
GOI	Government of India
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
LHV	Lady Health Visitor
NRHM	National Rural Health Mission
PHCs	Primary Health Centres
PHN	Public Health Nurse
Sida	Swedish International Development Agency
TNAI	Trained Nurses Association of India
TOT	Training of Trainers

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## The Role of the District Public Health Nurses: A Study from Gujarat

### 1. INTRODUCTION

Public health nursing as defined by the American Association of Public health (APHA 1996) is the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences.

Public health nursing is a systematic process by which:

1. The health and health care needs of a population are assessed to identify subpopulations, families and individuals who would benefit from health promotion or who are at risk of illness, injury, disability or premature death.
2. A plan for intervention is developed with the community to meet identified needs that take into account available resources, the range of activities that contribute to health and the prevention of illness injury, disability, and premature death. The plan is implemented effectively, efficiently and equitably.
3. Evaluations are conducted to determine the extent to which the intervention has an impact on the health status of individuals and the population.
4. The results of the process are used to influence and direct the current delivery of care, deployment of health resources, and the development of local, regional, state, and national health policy and research to promote health and prevent disease.

According to Wilkinson (1958), modernization of maternal care in India began in 1886 in the form of dai training in Amritsar by a missionary Miss Hewlett. Dai training was formally taken up by the provinces during colonial rule by about 1900. Between 1875 and 1885, several hospitals for women and children were established across India under the Dufferin fund. These hospitals also trained midwives in modern child birth practices. There was a realization that it was not enough to train dais and midwives but that it was necessary to train nurses for preventive work amongst communities. This was the beginning of Public health nursing in India with the *health visitors* training as a small initiative in 1921 in Delhi by Miss Griffin and Miss Graham. To begin with this training was for nine months but was found to be too short, and so the time was lengthened to eighteen months. Gradually other such schools were opened in all the provinces of colonial India. These health visitors were posted in the villages, cities also industrial units to educate communities about personal hygiene and practices of childbirth, motivate them to use modern medical facilities, hold antenatal and post natal clinics, and also train dais (Nursing journal of India July 1930, September 1942).

Over time, it was observed that health visitors could not provide comprehensive health services to the community as they were not trained in nursing. There was a critical need for a professional public health nurse and midwife (Bhore Committee, 1946), but the training of LHVs was continued since enough PHNs were not available to replace them. The Mudaliar Committee (1959) suggested replacing them with public health nurses reiterating the recommendations of Bhore Committee. There were many problems with the continuation of the LHV course. When midwifery was made an entry requirement, there were very few candidates (ANS 2005). The absence of promotional avenues and the problems of living in villages and small towns with few

amenities further made the LHV course unattractive (GOI, 2nd Five Year Plan). Hence by the '90s, two types of courses remained: a) Regular Course for 18 months, and b) Integrated Course of Midwifery Cum Health Visitor training for two and half years. Entrance qualification was matriculation. Today, there is no direct entry to LHV course. The training of Health Visitors was discontinued from September 1977. Six months promotional training is given to ANMs with at least five years experience. The curricula for six months promotional course is prescribed by INC.

Another development of relevance was the starting of the diploma course in Public Health Nursing in the Rani Amrit Kaur College of Nursing, New Delhi in 1951 on the recommendation of the Bhore Committee. This course was later transferred to All India Institute of Hygiene and Public Health, Calcutta in 1952 (TNAI, 2001). The Public health nursing course was started in Kerala, Indore, Nagpur and Ahmedabad.

The current Public health nurse diploma course is of 10 month duration. The eligibility to get this diploma is either 3.5 years of General Nursing and Midwifery (GNM) or 4 years of B. Sc. Nursing with 5 years of work experience as a staff nurse in a clinical setup and 2 years of experience in public health. There is only one training institute in Gujarat offering this course. The degree of "Diploma in Nursing Education and Administration" which was earlier known as "Diploma in Public Health Nursing" opens opportunities to work as Public Health Nurses in nursing schools, hospitals, regional offices' district training teams (DTT) or district panchayat in the state of Gujarat. They can get promoted to the post of District Public Health Nursing Officer after getting the diploma. Those who get appointed at the district panchayat, are responsible for supervising the nursing workforce of their respective districts. They are designated as District Public Health Nurses.

Within the public health system in India, the Public Health Nurse called the District Public Health Nurse (DPHN) is the senior most health worker at the district level. She leads the work of the Auxiliary nurse midwives (ANM), now called Female Health Workers (FHW) and their supervisors- the Female Health Supervisor (FHS). The post of the DPHN was created around 1962 to guide, supervise and monitor the performance of public health nursing personnel in the district (Mudaliar committee 1959).

In light of recent policy thrust on the role of skilled birth attendants for reducing maternal and neonatal deaths under the National Rural Health Mission and the Reproductive and Child Health programme-II, the role of district public health nurse needs to be reviewed and revived. Her role in training the FHWs as 'Skilled Birth Attendants', providing them support at the field level and ensuring good quality maternal and child health services is crucial to achieve the goals set under the national policies.

This study was taken up with the objective to understand and define the current role of the DPHN, and how her role as a mentor and guide for the midwives working at the periphery could be improved. The study assessed the work pattern and work load of the DPHNs and the perceptions of their supervisors about their role. This study was a part of a larger project supported by Swedish international development cooperation agency (Sida) for improving midwifery and Emergency Obstetric Care (EmOC) for better maternal health in India.

## 1.1 Overview of Public Health Nursing in Gujarat

There are two positions of nursing at the state level; the Assistant Director Nursing in charge of the hospitals, schools and colleges of nursing and the State Public Health Nursing Supervisor who leads the public health nursing work force (Fig-1).

As part of the public health network in India, there is a female health worker (FHW) for every 5000 population posted at the sub centre level. For every 30,000 population there is a Primary Health Centre (PHC) which supervises the work of 5-6 sub centres. For monitoring the work of the FHW, each PHC has a Female Health Supervisor (FHS). The FHS is promoted to this position from the post of FHW after some experience as FHW and 6 months training for supervision. Originally, in the place of FHS, there were lady health visitors (LHVs) who supervised the auxiliary nurse midwives, now called female health workers. These LHVs were trained for 2 years.

Both the FHSs and the LHVs are supervised by the Block Health Visitors (BHV) at the block level which is below the district. At the district level, all the public health nursing staff (FHS/LHV, FHW) is supervised by the District Public Health Nurse (DPHN). All these district public health nurses are supervised by the State Nursing Supervisor (fig 1). The status of availability of the public health nursing workforce is given in table-1. There is 75% shortage of FHS/LHVs and 56% shortage of the Male health worker who is a co-worker of the FHW.

**Table-1: Positions of Public Health Nurse/Midwife workforce in Gujarat**

Particulars	Required	Sanctioned	In position	Vacant		Shortfall	
	(R)	(S)	(P)	(S – P)	%	(R – P)	%
Multipurpose worker (Female)/ ANM at Sub Centres & PHCs	8374	7274	7071	203	2.79	1303	2.42
Multipurpose worker (Female)/ ANM at Sub Centres	7274	7274	7071	203	2.79	1276	17.54
Health Worker (Male) at Sub Centres	7274	5306	3347	1959	36.92	3927	53.99
Lady Health Visitor/Female Health Supervisor	1073	481	267	214	44.49	806	75.12
Health Assistant (Male) at PHCs	1073	32188	2421	797	2.48	*	*
Nurse midwife/ Staff Nurse at PHCs & CHCs	2984	2769	1585	1184	42.76	1399	46.88
* Surplus Source: Rural Health Statistics Bulletin 2007							

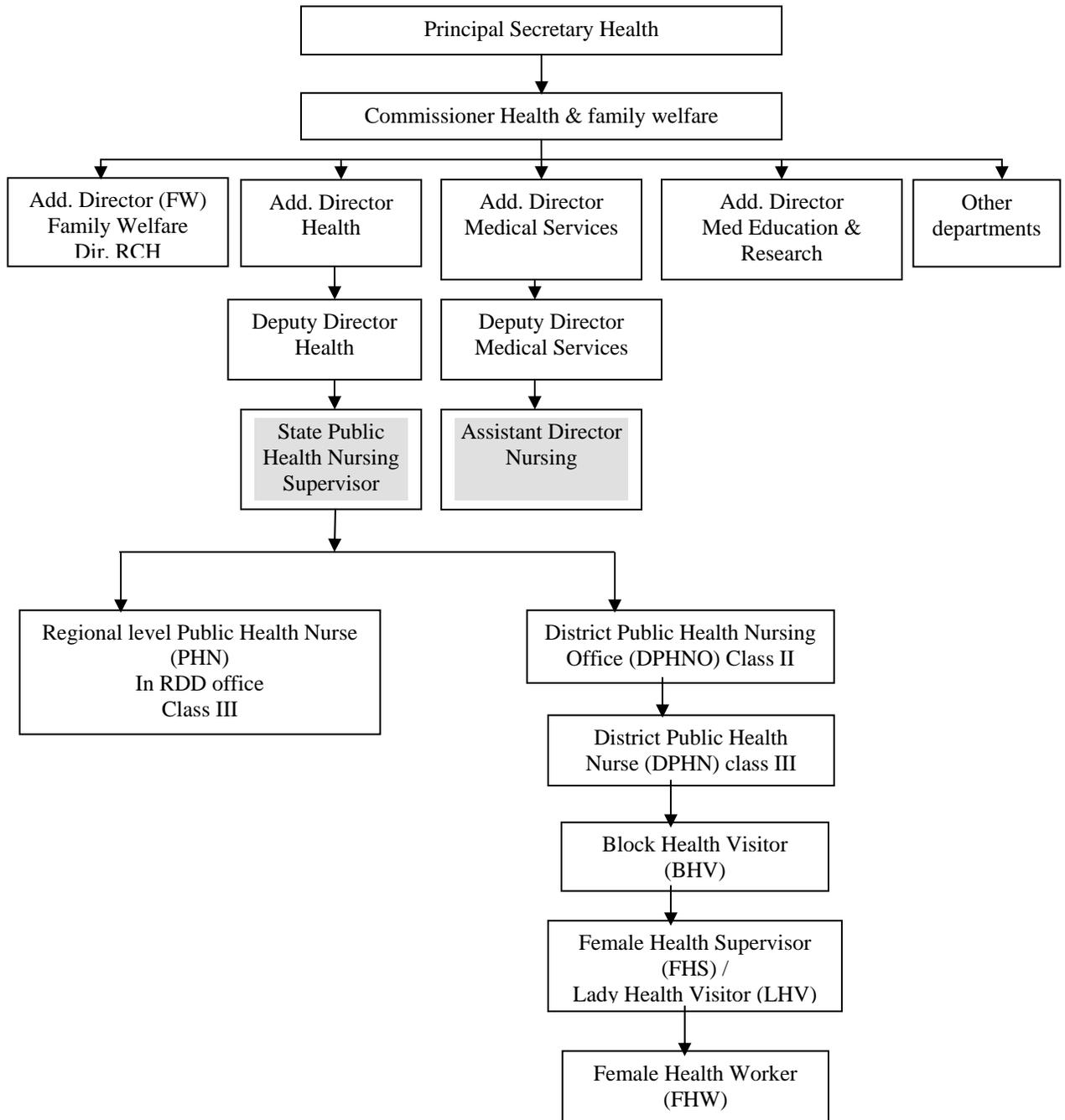
Typically, in a district in Gujarat, there are about 300-350 ANMs/FHWs, 45-50 female health supervisors spread across 45-50 Primary Health Centers and 300-350 sub centers. Having a single person as a leader and mentor of so many staff is clearly not adequate. Very few studies have

been carried out on DPHNs, that have shown that for nearly three decades since the post came into existence, the number of DPHNs and their skills and capacities have remained the same or have weakened even though the number of subcentres and activities has been steadily rising (ANS -2005). Lack of supporting facilities such as transport makes the job of a DPHN involving supervision and supporting the work of FHSs and FHWs posted in remote rural areas difficult. Gradually their role has been reduced to only a desk job at the district headquarters. The study further shows that the services of DPHNs are under valued and her qualification and experience are under utilized.

## **1.2 District Public Health Nurses and District Public Health Nursing Officers**

The District Public Health Nurses (DPHNs) are class III employees, originally part of the Maternal and Child Health division of Department of health. They are primarily responsible for monitoring maternal and child health services in the district. The DPHNs based on their seniority are promoted to the post of District Public Health Nursing Officers (DPHNOs) as class II gazetted officers who are actually part of the Family Planning department. They were primarily responsible for supervising the family planning activities in the district. But over the years, both have come to have the same job profile.

Six new districts which were formed in 1998-99 amongst the 25 districts of Gujarat do not have the position of DPHNO. Instead they have two posts of DPHNs. The DPHNs and DPHNOs are the members of the District Health team headed by the Chief District Health Officer. They are advisors on all matters related to nursing services and education at the district.

**Fig 1: Organizational structure of Nursing Professional at state level in Gujarat State**

## 2 AIM & OBJECTIVES

### 2.1 Aim

To understand the role of District Public Health Nurse (DPHN) and DPHN officer in the public health care system in Gujarat - job description, actual work practice and discrepancies if any.

### 2.2 Objectives

1. To review the human resource management practices such as recruitment, training, placement, performance appraisal systems and job descriptions for DPHNs and DPHNOs.
2. To understand how the DPHNs/DPHNOs plan and execute their work, kind of activities and the time spent in each by the DPHNs / DPHNOs through a time motion study.
3. To investigate the motivation of the DPHNs/DPHNOs and theirs' and CDHO's perceptions about priority given to tasks.

## 3 METHODOLOGY

This was a time-motion study consisting of time – motion observations of time spent in each activity and the content of the activity, and structured interviews for information about personal and professional profile of the respondents, and their perceptions about work.

A pilot one week observation was done in one district after which the tools were refined. It was decided to observe the DPHNs for 6 working days in continuation, from Monday to Saturday. Initially it was decided to observe only the DPHNs but later the DPHNOs were also included as they both seem to have the same job role and work profile despite being at a different hierarchical level in the system.

The observations were done from March to October 2008 with a break during July due to heavy monsoons.

### 3.1 Sample

The 25 districts of Gujarat have been grouped into 6 regions- These are Ahmedabad, Gandhinagar, Rajkot, Bhavnagar, Vadodara and Surat. Two districts from each of the 6 regions were selected depending on the availability of DPHNs and DPHNOs. Table-2 shows the districts selected for the study. It was decided that the districts where at least one position of the DPHN/DPHNO was filled, would be included in the study.

**Table 2: District level nursing position in the sample districts**

Region	Name of the District	DPHNs		DPHNOs		Total	
		Sanctioned	In position	Sanctioned	In position	Sanctioned	In position
Ahmedabad	District 1	1	1	1	1	2	2
	District 2	1	1	1	1	2	2
Gandhinagar	District 3	1	1	1	0	2	1
	District 4	1	1	1	0	2	1
Rajkot	District 5	1	1	1	0	2	1
	District 6	1	1	1	0	2	1
Vadodara	District 7	2	1	0	0	2	1
	District 8	2	1	0	0	2	1
Bhavnagar	District 9	2	1	0	0	2	1
	District 10	1	In-charge	1	0	2	0
Surat	District 11	2	1	0	0	2	1
	District 12	1	In-charge	1	1	2	1
Total	12	16	10	8	3	24	13

Two of the districts were excluded from the study as both, the DPHN and DPHNO post was vacant and an LHV was in charge of DPHN. In all, 13 respondents were studied; 10 DPHNs and 3 DPHNOs. Eleven Chief District Health Officers who are their supervisors at the district were also interviewed.

### 3.2 Tools

- a. **The Time-motion study:** The time motion study is a combination of time study developed by Taylor and motion study developed by Gilbreths (S Kartikeyan, 2009, Price, 1989) These methods were basically used by the manufacturing industry to determine the quickest and most efficient method to perform a job. At present, the two are used together as they supplement each other. Time motion study is the analysis of the methods, of the materials and of the tools and equipments used or to be used in the performance of work- an analysis carried out with the purpose of

1. finding the most economic way of doing this work
2. standardizing the methods, materials, tools and equipments
3. actually determining the time required by an average worker to do the task
4. training the workers in a new method

Time motion studies have been used widely in the health sector by hospitals to determine the number of standard hours and the best possible way to perform tasks and give better services to the patients (Bamisaiye, 1984). In Public Health three types of time motion methodology have been used widely. First is the Continuous Observation method where the time consumed in performing the activities by the observed individual is measured by an observer on a continuous basis. Second is the Work Sampling technique where the observer records the multiple randomized instantaneous observation of the observed individual's activity from presumably

inconspicuous places and third is self administered. Out of the three kinds, we decided to conduct the study using continuous observation method.

On each day, the observers met the respondents at the office or at a prefixed starting point depending upon the schedule of the worker. The observer remained with her till the work was over and the respondent left for home. During the day all her activities were systematically recorded by the observer, including the nature of and time spent in each activity. The recorded time spent in travel from home and back was as reported by the respondent. If it was a field visit day, the observer traveled with the respondent and continued with similar observation. The days of holidays, personal leave and absenteeism during the period of observation were also noted.

- b. **Interview with respondents**: An interview guide containing personal and professional details was used for the background and profile of respondent.
- c. **Interview with supervisors**: The Chief District Health Officer (CDHO) were interviewed using open ended interview guide to understand perceptions about the role and performance of the DPHNs/DPHNOs.

### 3.3 Data collection and Analysis

The time motion study data was collected in printed forms. Groups of activities were coded into categories. The study data were coded into categories and were further divided into sub-categories. In all, 127 codes were used. Microsoft excel was used to analyze coded activities. The broad categories were:

**Supervision**: Supervision was further classified into 15 activities, clubbed under 3 broad categories- Field Supervision on normal days and Mamta divas (A special day designated for maternal and child health clinic), Guidance to workers, and Problem solving.

**Office work**: Office work was classified into 3 main activities: Activities in office, Training, Enquiry and complaint resolution. Work related phone calls and time spent on discussion with colleagues during supervisory field visits, were also coded under office work.

**Service delivery**: Service delivery was classified into categories based on programmes like maternal health, child health, and family planning etc.

**Travel**: Travel was classified into two types- Routine travel (from home to place of work and back to home and/or travel for official purpose) and Special travel (Occasional long distance travel for official purpose)

**Others**: This category includes idle conversation, sitting idle or reading newspaper/magazine. The observers were careful to categorize significant discussion and random gossiping and idle conversation separately. Work related conversations were coded under the category of discussion with seniors or colleagues. Idle conversation included all conversations having no relation with work.

## 4. RESULTS

The results are presented in three broad sections. The first section is brief situation analysis of Public Health Nursing situation in Gujarat and the personal, professional profile of the respondents. The second section discusses the results of the time motion study. The third section presents conclusions and recommendations.

### 4.1 Section-1 Overview of the district level nursing personnel of Gujarat

#### 4.1.1 Availability

Gujarat has 180 sanctioned positions of PHN(142) and PHNO (38), posted at District Panchayat and District Training Teams, out of which 68% are filled. There are 28% vacancies of the sanctioned posts of PHN and 47% vacancies of the sanctioned posts of PHNO.

Each District Panchayat has two supervisory posts for nursing, the DPHN and DPHNO. The number of sanctioned posts of DPHNs is 16, and that of the DPHNOs is 8 (considering 4 newly formed districts) in Gujarat. The exact number of the DPHNs and DPHNOs posted at District Panchayat was not available with the State nursing officer. The researchers got the information from each district. At the time of this study, only 2 out of the 12 sample districts had both the positions filled, 10 districts had DPHN, and only 3 had DPHNO. Out of the 4 new districts only 1 had a DPHN. Many CDHOs could not recall the definite time since the DPHNO posts have been vacant.

#### 4.1.2 Profile of the DPHNs and DPHNOs

##### a. Personal information

As seen in table-3, out of 13 DPHNs and DPHNOs majority were above 45 years of age, median age being 50 which indicates that there has been very less new recruitment. A majority of the DPHNs/DPHNOs (60%) are married, 50% of whose husbands are government employees. Husbands of the others are engaged in occupations like farming, private business.

Five out of 7 DPHNs/DPHNOs of the age group 41 to 50 reported good health, while 5 out of 6 DPHNs/DPHNOs in the age group of 51 reported having some illness such as high blood pressure, diabetes, joint pains and eye problems (excluding short sightedness) like cataract. Some reported sun blindness, spondylitis, and asthma also. The majority of those suffering from high blood pressure are on medication. Some of them stated that their performance is affected as a result of their poor health. For example, in one of the geographically rugged districts the DPHN was found to avoid field visits because she had undergone angioplasty a year ago. Field visits tired her after which she had to rest for two days.

**Table 3: Profile of selected DPHNs and DPHNOs**

Characteristics	DPHN n=10	DPHNO n=3	Total n=13
<b>Age</b>			
Below 40	0	0	0
41 to 45	3	0	3
46 to 50	3	1	4
51 to 55	1	1	2
Above 55	3	1	4
<b>Religion</b>			
Hindu (including Jain)	6	1	7
Muslim	0	0	0
Christian	4	2	6
Other	0	0	0
<b>Caste</b>			
General	7	3	10
OBC	2	0	2
SC/ST	1	0	1
<b>Marital Status</b>			
Married	7	1	8
Divorced/separated	1	1	2
Never married	1	1	2
Widowed	1	0	1
<b>Occupation of husband (n = 8)</b>			
Private	1	0	1
Government	2	1	3
Business	1	0	1
Retired from Private Job	0	0	0
Retired from Government Job	1	0	1
Other	2	0	2

One DPHN from a tribal district was anemic with sickle cell anemia which is prevalent in the tribal population. Eleven out of the 13 DPHNs/DPHNOs get their hemoglobin tested regularly, mostly when they go to the field to oversee and guide the work of the field level workers.

Since the post of DPHN and DPHNO is meant for supervision of field staff, their age and their health should be a major consideration while giving them posting. Those PHNs who have serious health problems should be relocated to a teaching post.

**Place of residence**

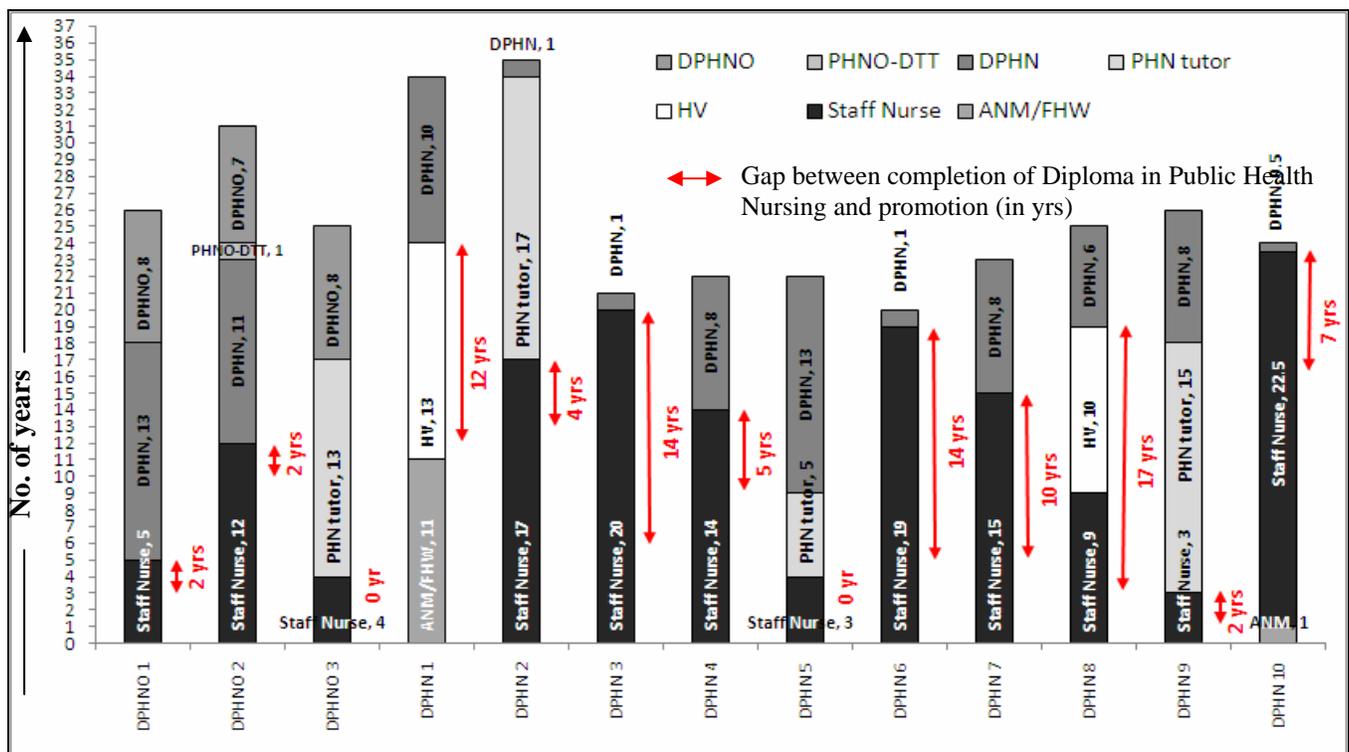
Out of 11 selected districts, except for the 4 new districts 7 had living quarters available for the staff of district panchayat. Four out of 13 DPHNs lived in the staff quarters. Out of the 9 who did not live in the staff quarters, 3 stay in the same town where the district panchayat is located, 1 commutes from the neighboring town and the remaining 5 live outside the district. One of the DPHN spent 3 hours per day commuting. On an average the DPHNs who were living outside the district spent one hour in travel from home to office and back.

**b. Professional information**

**Lack of public health knowledge and experience:**

All the selected DPHNs/DPHNOs were Registered Nurse and Registered midwife (RN & RM) after a 3 years Diploma in General Nursing and Midwifery (GNM). Most of the DPHNs and DPHNOs had started their career as staff nurses in the Community Health Centres (CHCs). Two DPHNs out of the 10, had basic training as Auxiliary Nurse Midwife (ANM) followed by GNM. One among them had worked at the field level for 24 years- 11 years as ANM & 13 years as Health Visitor. Except these two DPHNs the others did not have public health experience although 6 had more than 10 years of experience as a staff nurse (Fig-2).

**Fig 2: Details of work experience, training as PHN and promotion**



Majority of the DPHN and DPHNs lack the appropriate public health experience required for monitoring the work of the LHV/FHS and the FHWs. They are promoted as DPHNs after completion of the 10 month course “Diploma in Nursing Education and Administration and elective in Public Health Nursing”. This course gives training for both district public health nursing and for becoming a tutor in ANM or GNM schools. The public health exposure during the training is not adequate.

***Gap in training and posting:***

Those who complete the course wait for their promotion, joining back to their previous position. Whenever there is a requirement or vacancy, promotion is given to the aspirant based on merit and performance. However as seen in Fig-2, there is an average gap of 7 years between completing the diploma programme and their promotion (maximum 17 years; minimum 0 years). Five of the PHNs had to wait for 10 or more years for promotion. The training becomes redundant in such cases because of this long gap between training and posting. This is surprising because as seen in the earlier sections there are vacancies at district level on the one hand and there are eligible candidates waiting for promotions on the other hand.

**c. Job Descriptions and priority given to tasks**

Most of the DPHNs/DPHNOs did not have a written job chart. Out of 13 DPHNs and DPHNOs, only 5 had written job charts (3 received after demand). Most of the PHNOs could not define their role clearly. They mentioned two activities as part of their job profile- collecting and compiling reports from the block, and supervision of field staff of the blocks and the PHCs.

Their supervisors, the CDHOs were not very clear about the role of the DPHN & DPHNOs either. Only 3 out of 11 CDHOs interviewed seemed to be clear of their role. The DPHNs/DPHNOs and CDHOs were asked to rank categories of tasks performed by the DPHNs/DPHNOs (Table-4) on a likert scale of 1 to 4, where 1 indicated first priority and 4 indicated the least. These categories of tasks were based on their job descriptions given by the state officer. Though the numbers are small, percentages were calculated for better understanding. The responses for each activity are summarized here.

**i. Records and registers:**

Table-4 shows a difference in priority given to records and registers by DPHNs and CDHOs. Fifteen percent of DPHNs give first priority to records and registers and 46% give the second priority, while 91% of the CDHOs give it the third priority. This maybe because, the newly established District Project Management Unit (DPMU) has taken over this task performed by the DPHNs earlier. The DPHNs still see it as an important activity while the CDHO feels they have a limited role in collecting and compiling monthly statistics from registers of each block.

**ii. Supervision and administrative work:**

As seen in table-4, the DPHNs and DPHNOs give first priority to supervision, followed by records and registers, training and education and the last to administrative work. The CDHOs who are their supervisors think their first priority should be supervision, followed by training and education, records and registers and the last to administrative work. There seems to be an

agreement amongst the CDHOs and the DPHNs regarding supervision which is ranked as first priority by both and administrative work which is ranked as fourth priority by both.

iii. Training and education:

Similarly there is a difference in the priority given to training and education. All the CDHOs have given training and education as 2<sup>nd</sup> priority while only 15% and 38% of the DPHNs give it the first and second priority respectively.

**Table-4: Comparison of priority given to tasks of DPHNs/DPHNOs by DPHNs/DPHNOs themselves & CDHOs**

Priority	1st priority		2nd priority		3rd priority		4th priority		Total
	DPHNs/ DPHNOs	CDHOs	DPHNs/ DPHNOs	CDHOs	DPHNs/ DPHNOs	CDHOs	DPHNs/ DPHNOs	CDHOs	
Records and registers	2 (15%)	1 (9%)	6 (46%)	0	4 (31%)	10 (91%)	1 (8%)	0	24
Supervision	9 (69%)	10 (91%)	2 (15%)	0	2 (15%)	1 (9%)	0	0	24
Training & education	2 (15%)	0	5 (38%)	11 (100%)	6 (46%)	0	0	0	24
Administrative work	0	0	0	0	1	0	12 (92%)	11 (100%)	24
<b>DPHN/DPHNOs=13      CDHOs=11</b>									

Therefore there is a need to clarify to the DPHNs/DPHNOs and CDHOs what exactly is their role. The CDHOs need to take more interest in the DPHNs and DPHNOs work and help them to perform the work of supervision and training and education which have been identified as priority tasks, more effectively.

**d. Job satisfaction:**

Fifteen percent of the DPHNs / DPHNOs interviewed are highly satisfied, 77% are somewhat satisfied and 8% are not satisfied with their job. The reasons expressed were, some of them were nursing tutors in nursing schools for years so feel that they do not have much experience for field level work. They want to be transferred back to the nursing schools. One of the reasons for this request could be the higher salary and relatively lesser work load of the nursing tutors.

**e. Satisfaction with facilities provided:**

Majority (69%) DPHNs/DPHNOs were highly dissatisfied and 8% are somewhat satisfied with the facilities provided to them. The programme officers for malaria, TB, quality assurance and also contractual employees like the district programme coordinator who are at the same hierarchical level as the DPHNOs have been given facilities like a vehicle for their official use, and a proper sitting place. The DPHNO, despite being a class II officer has her office in some technical department wherever there is space, consisting of a table, chair, and cupboard. She does not have a designated office.

It seems that the district office as well as the state office which is the policy making wing does not give enough importance to the role of DPHNs. Unless she is given administrative support and facilities, she will not be able to lead the nursing staff of the district effectively.

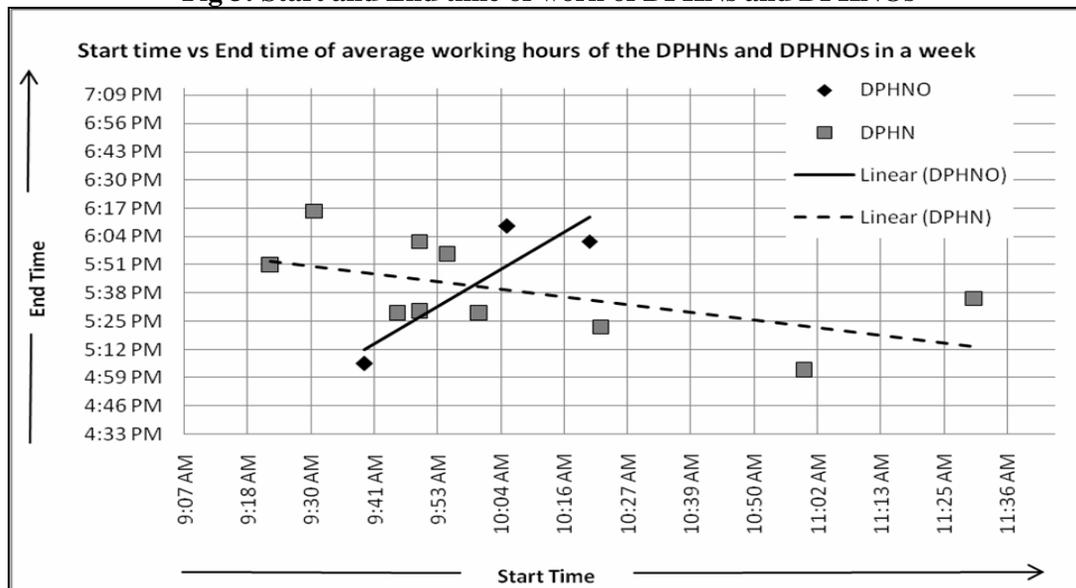
## 4.2 Section-2 Time - motion study

The 13 DPHNs/DPHNOs were observed for 67 days, from March to October 2008, excluding the month of July and holidays. Out of the 67 days, they were on leave for 7 days and were absent for 3 days during which there were no observation. One additional day was unobserved because the DPHN was attending a regional meeting where the researchers were not allowed. So effectively the PHNs were observed for 57 days.

### 4.2.1 Starting and ending time of work

The district Panchayat office is open for 8 hours from 10:10 am to 6:10 pm everyday. The average starting time during the observed months was found to be 9:59 am (11 minutes before official starting time) and the average ending time of work was 5:30 pm (40 minutes before designated time), making the average total working hours as 7 hours 2 minutes, 31 minutes less than the designated time. This excluded the travel time from home to office and back.

**Fig 3: Start and End time of work of DPHNs and DPHNOs**



The DPHNOs who start work early also end work early, while those who start late end late (Fig-3). In contrast to this, the plot for DPHNs shows a reverse trend i.e. those who start early end late and those who start late end early. There are two extreme cases who start work quite late and end early. This variation could be because of several reasons like individual differences in motivation and commitment, work culture in office, accountability, work and time demands by the office and so on.

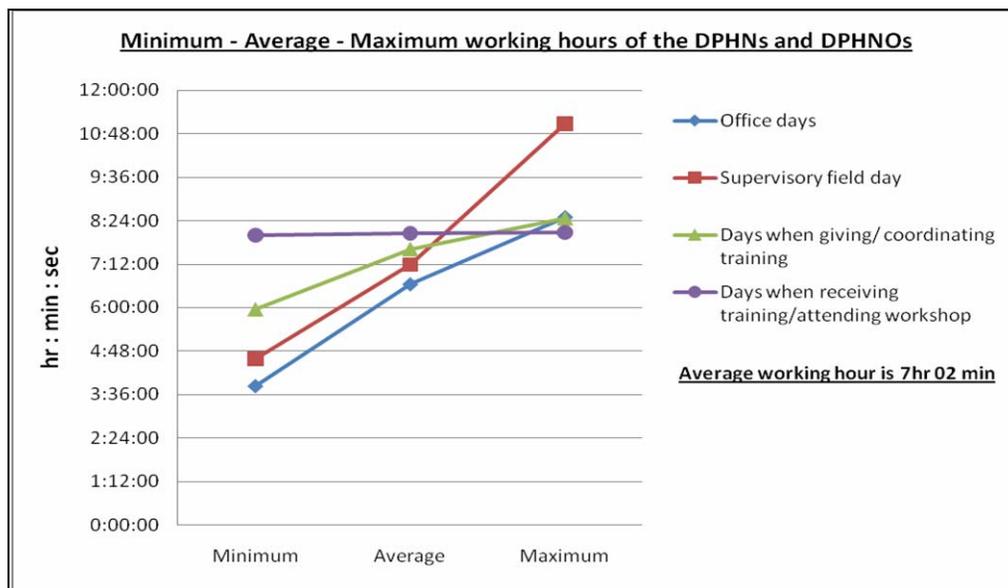
There was no variation found in the starting and end times of work of the DPHNs/DPHNOs across the months. Variations may be found during the months of January, February and March,

which are the peak months for achievements against targets given for services. These peak months may show a different trend.

#### 4.2.2 Total Working hours

The 57 day's observation translates to 430 hours 14 minutes of observation. This includes routine activities such as office work, field supervision, training and travel. It also includes special travel for attending state level meetings and trainings, generally once a month which requires several hours of travel to reach the state's capital, Gandhinagar. This is excluded in the analysis of time and motion as it distorts the overall interpretation. The average working hours of the DPHNs/DPHNOs was 7 hour 2 minutes excluding special travel and 7 hours 33 minutes if special travel is included. On an average working day, the officers spend 1 hour less than the stipulated working time of 8 hours.

**Fig 4: Minimum, Maximum and average working hours in a day of the DPHNs & DPHNOs (including routine work related travel and excluding special travel)**



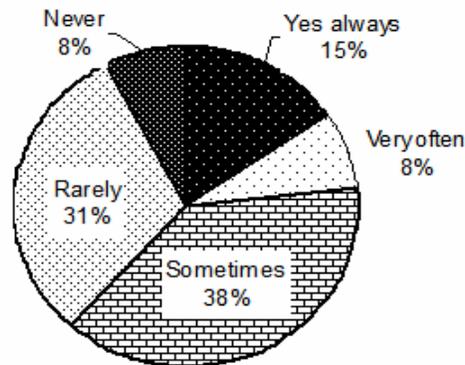
The average working time varied according to the type of day (Fig-4). The office days were the shortest and with a lot of variation. The average working hours during an office day were 6 hr 38 minutes (Minimum 3 hours 50 minutes & Maximum 8 hours 29 minutes). The days of attending training programmes and workshops seemed to be the longest days (minimum 8 hours and maximum 8 hours 5 minutes) with the least variation. The days when the DPHNs were coordinating training were shorter with average of 7 hours and 37 minutes (minimum of 5 hours 57 minutes & maximum 8 hours 29 minutes). Field days or supervisory days also had variations-the average working hours during a field day were 7 hours and 11 minutes (Minimum 4 hours 35 minutes & Maximum 11 hours 5 minutes).

To conclude some DPHNs/DPHNOs cut short their working hours substantially on office days and field days which are routine activities. Coordinating and attending training and workshops are occasional special activities. Therefore shorter working hours during office and field days can be seen as a pattern followed by DPHNs/DPHNOs in routine.

### 4.2.3 Work planning and adherence to work schedule

In every district, Mondays and Thursdays are office days while the other days could be planned for supervision and other activities. Out of the 57 days of observation, the pre-planned schedule was followed for 26 days (46%) (Fig-5).

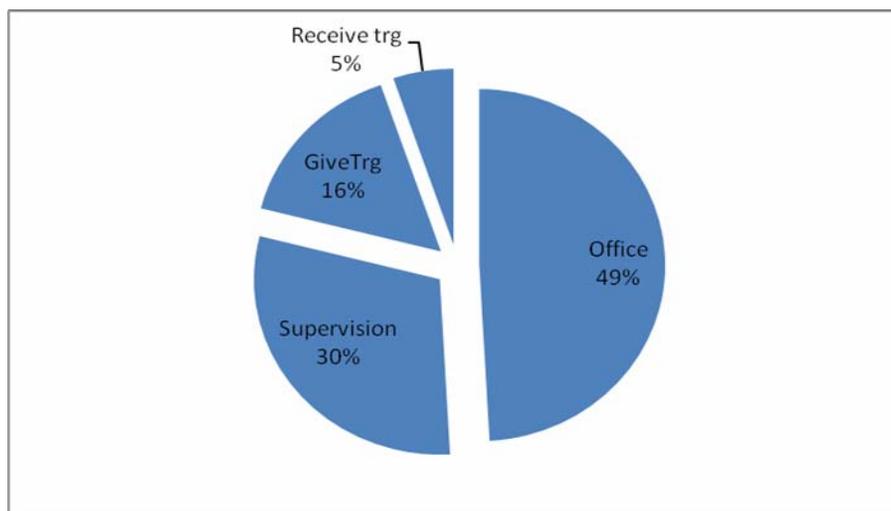
**Figure-5: Adherence to Work plan by DPHNs/DPHNOs**



Work schedules were changed because of unplanned activities like coordinating or giving training to the workers, special health campaigns. As reported by the DPHNs, on the last and the first week of every month, they do not go to the field for supervision since they compile statistics from the blocks between 22-25 of every month to be submitted to the state office by 5 of the next month.

Out of the 57 days, the DPHNOs and the DPHNs spent 28 days(49%) in office including attending meetings, 17 days (30%) in field for supervision, 9 days (16%) in either providing training to the workers or coordinating some district level training and 3 (5%) days in attending training or workshop at the state level (Fig-6).

**Fig 6: Distribution of days by type of activities observed for DPHNs/DPHNOs**



## 4.2.4 Time and activity distribution during an office day of DPHNs/DPHNOs

### a. Activities and time distribution during an office day:

The DPHNs and DPHNOs have various administrative functions for which they spend time at the district headquarters twice a week, i.e. every Monday and Thursday. They are the link between the field level workers and the managers at the district. It is their responsibility to monitor the performance of the grassroots level nursing staff, solve their problems or bring them to the notice of the district level officials. They also compile the monthly reports and submit to the state office.

As shown in Fig-6, the DPHN/DPHNOs spend 49% of their time in the office and work for an average of 6 hours and 38 minutes during an office day. Maximum time during an office day is spent in paper work (1hr, 2 minutes, 17%) which includes filling in registers and diary, and data compilation (Fig-7). They also spend 9% of the time in office in activities such as making copies of documents, and filing documents. Thirty percent of the office time is free [personal work (10%) + idle conversation (12%) + sitting idle (8%)] excluding the official breaks (11%).

As also seen in table-5, on an average office day, the DPHNs and DPHNOs spend 3 hr 48 minutes (56% of actual time spent in the office and 47% of the official working hours), in work related activities. They take a break for about 45 minutes while the rest of the time (2hr 5 minutes) is spent in sitting idle, idle conversation or personal work. This clearly shows that the DPHNs and DPHNOs are under utilized. They may not need 2 days in office for reporting. This time could be used constructively in strengthening field services through supervision.

**Table-5: Time distribution of work & breaks on an office day of DPHNs & DPHNOs**

	<b>Time spent in work</b>	<b>Free time</b> (Breaks, personal work, idle conversation & sitting idle)	<b>Total</b>	<b>Difference in stipulated &amp; actual work hrs</b>
DPHN (n=10)	3hr 35min	2hr 46min	6hr 21min	1 hr 39 min
DPHNO (n=3)	2hr 27min	5 hr	7hr 27min	33 min
Avg of DPHN/DPHNO (n=13)	3hr 48min	2hr 50min	6hr 39min	1 hr 2 min

### b. Reporting:

The DPHN/DPHNO are involved in the compilation of 14 reports related to reproductive and child health, child immunization, maternal and infant deaths, various schemes and vertical programmes, out of which one is a weekly report, others are to be compiled once a month. Before the "District Project Management Unit (DPMU)" was established under the National Rural Health Mission (NRHM) in 2005, the monthly reports were compiled manually by the DPHNs/DPHNOs which took time. This was their major activity leaving less time for field supervision. The DPMU as a part of District Health Society, provides monitoring and management support to the District Health office. Now the monthly report is compiled on the computers by the monitoring and evaluation assistant in the DPMU. The DPHN helps the M& E

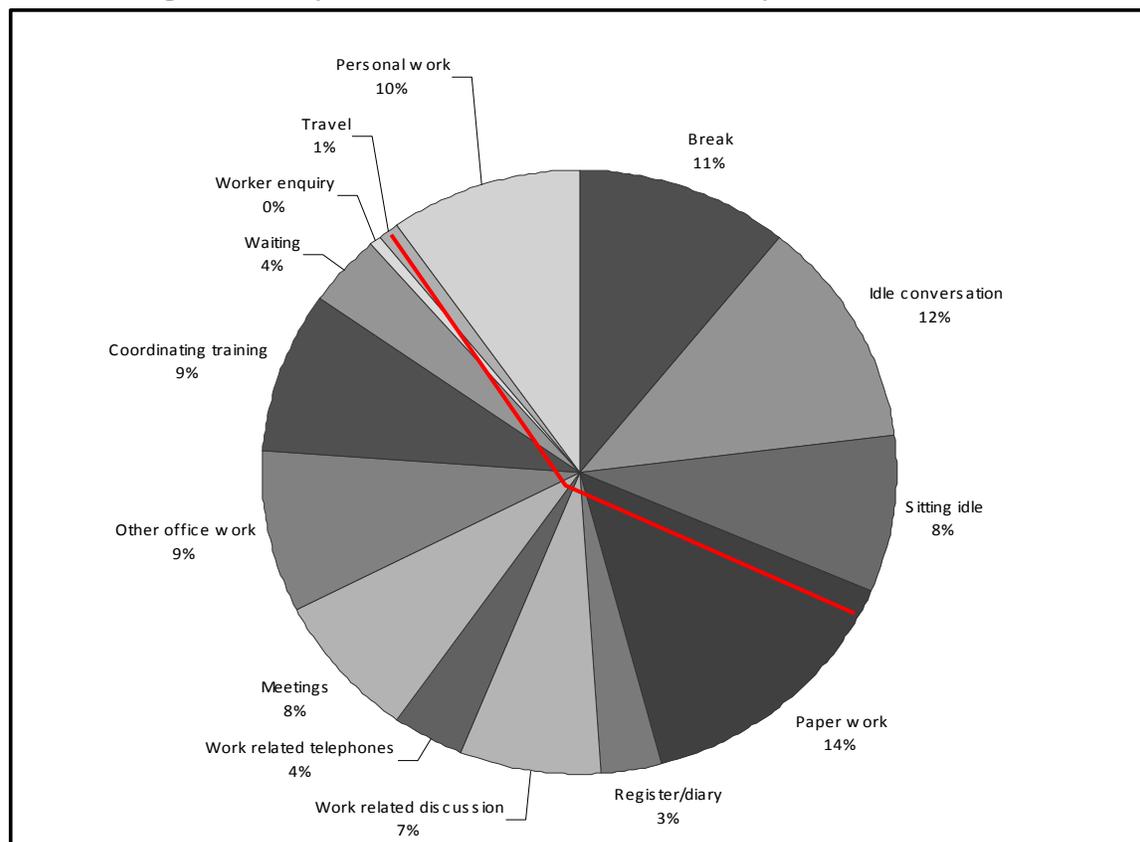
assistant in data entry. Because the DPHNs have poor computer skills their role is only supportive. This has decreased the workload of the DPHNs in the office to a great extent.

Once a month the DPHN and the M& E assistant carry the compiled form number 9 to the State Health Office at Gandhinagar. They sit at the state office and enter the data in the computer although they have sent the soft copy of the report through the Gujarat State Wide Area Network. This is duplication of the data which is entered at the district level. Consequently, for a work of not more than 2 hours in Gandhinagar, they end up travelling for the whole day. This becomes more difficult for the staff of the districts which are far from Gandhinagar.

There is substantial variation in the role performed by the DPHNs/DPHNOs based on their capacity and the trust of their supervisors the CDHO. For example, in two of the districts the DPHN and the DPHNO were active, their work was appreciated by their supervisors to the extent that they felt that they would not be able to function so efficiently without them. Contrary to this, there were cases where the DPHNs were excluded from all office activities including compilation of reports. Some district officers were of the opinion that the DPHNs do not show interest in the report work, so it has been taken over by the DPMU staff.

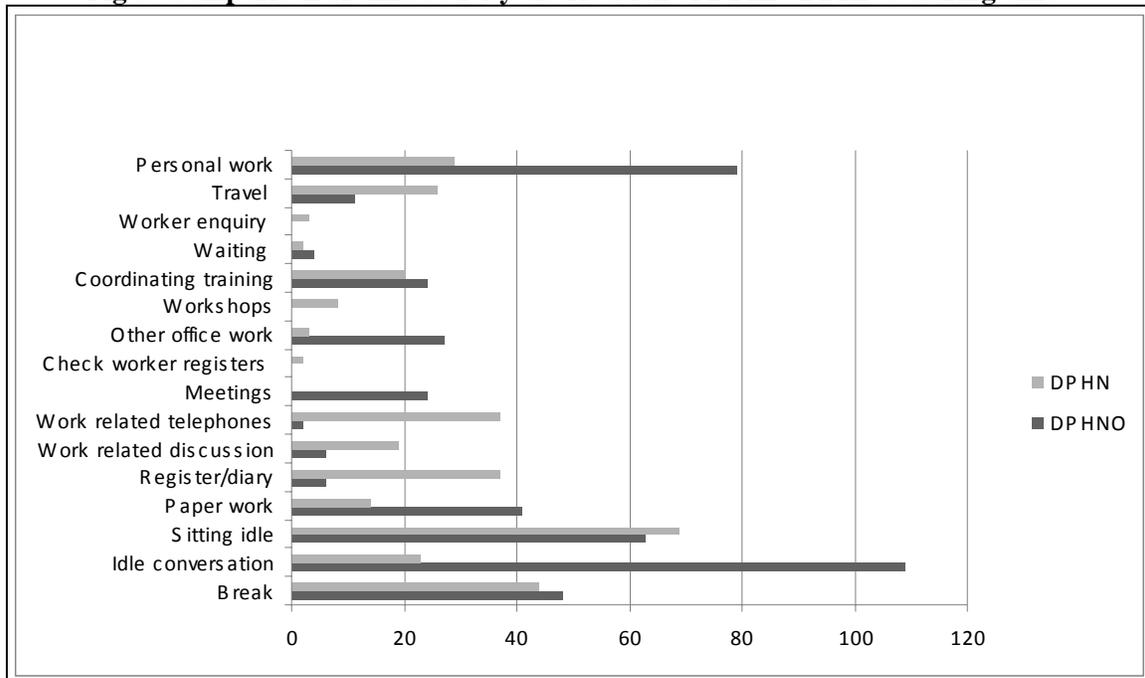
Besides the compilation of monthly reports, the DPHNs spend time in activities like filing records and reports, and planning their tour programme. For example we observed one of the DPHNO spend about 2 hours 42 minutes in one day in just filing the letters and reports given to her by her seniors. This kind of work can be easily done by some unskilled worker.

**Fig -7. Activity & time distribution of an office day (DPHN/DPHNOs)**



There were striking differences in the time spent in work during the office days of the DPHNs and DPHNOs (Fig-8). On an average, the DPHNs work for 5 hours 11 minutes, out of average office time of 6hr 21minutes while the DPHNOs work for only 2 hours 27 minutes, out of total average working time of 7hr 27minutes. The DPHNOs spent the rest of the time in personal work, idle conversation and breaks. They were found to be involved in non-work related activities for about 5 hours. This could be because the DPHNs work in coordination with the staff of DPMU, and are a link between them and the block level nursing staff. On the other hand, the DPHNOs feel that they are senior to DPHNs and the tasks performed by the DPHNs is not clearly their role. This leaves the DPHNOs with a lot of free time.

**Fig-8. Comparison of time/activity distribution of DPHN/DPHNO during office**



### c. Meetings

The DPHNs/DPHNOs actively participate in several district, regional and state level meetings- 4 monthly meetings at district and block levels, 3 quarterly meetings and 2 to 3 yearly meetings. They conduct district level review meetings every month, where they compile, verify data and give feedback to blocks. They also attend sector meetings at PHC and Block office as well during their field visits. They participate in the review meetings for Medical Officers and Block Health Officers, and the state level review meetings. The purpose of attending all these meetings is to understand the ongoing activities so that the relevant information is disseminated to the field level staff. They usually donot actively participate in the meetings.

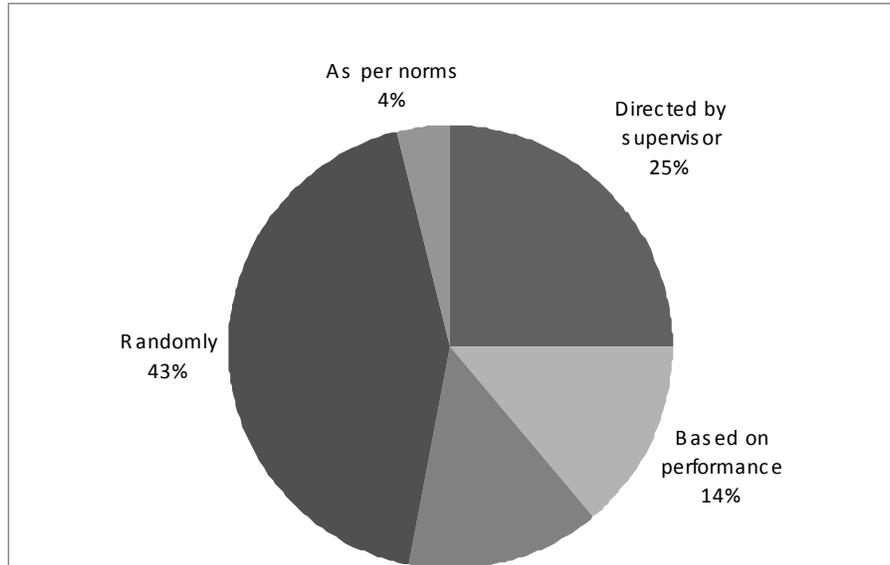
### d. Time and activity distribution of a field day of DPHNs/DPHNOs

In the last week of every month, the DPHN/DPHNO prepares a tour plan for her next month's monthly visit. This is a practice followed by all government staff with responsibility of supervision. This plan is supposed to be approved by the CDHO. Most of the CDHOs did not

know their tour programme because they do not check their monthly plan. Only 2 DPHNs reported sharing their monthly plan with the CDHO, while 7 reported they never do so.

It was also found that the field visits were not well planned. As seen in fig-9, 43% of the time the place of visit was chosen randomly. The field visits were guided by the availability of vehicle rather than need. Travel was combined with some other official's visit who had a vehicle.

**Fig-9 Criteria for planning field visits by DPHNs/DPHNOs**



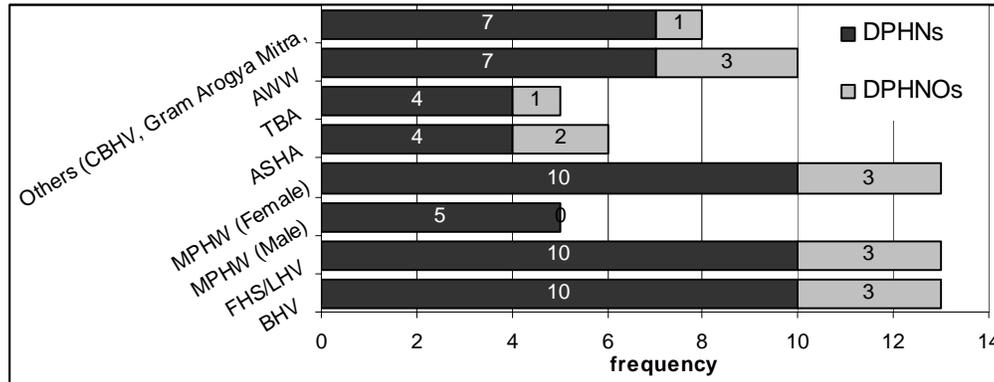
The DPHNs/DPHNOs spend 30% of their total time in supervision. The field day of the DPHNs/DPHNOs is for about 7 hours 11 minutes ranging from a minimum of 4 hr 35 minutes and maximum of 11 hr 5 minutes. However, a maximum of 4hr 12minutes and minimum of 1hr 17minutes was actually utilized in supervising and monitoring the field level staff and the rest of the time was spent on travel (maximum hours spent was 7 hr 40 minutes and minimum of 3 hr 4 minutes).

As seen in figure-11, the maximum time during a field day is spent in travel (38%) about 2hr 44 minutes. The DPHN and DPHNO are not assigned a vehicle for field visits, although the DPHNO manages to arrange a vehicle more often because she is a class two employee. They depend on the local transport which wastes a lot of their time as it is inefficient.

She spends about 21% of her time during the field day on activities which could be called “mentoring” of Female Health Workers which includes “guiding workers” 9%, “checking registers” 5%, listening to and solving problems of the worker 4% and “Assess work of the health workers” 3%. Majority (92%) of the DPHNs/DPHNOs go to households to get community feedback about work performance of the health workers, but only 8% go regularly, 84% visit occasionally and 8% never visit households. An example of the kinds of problems discussed and solved in the field by the DPHNs is a case when the female health worker, ASHA and Anganwadi workers were not getting the incentive amount of Rs 100/- fixed for Mamta Divas. The DPHN contacted the Medical Officer for this who came with the files immediately and made the payments.

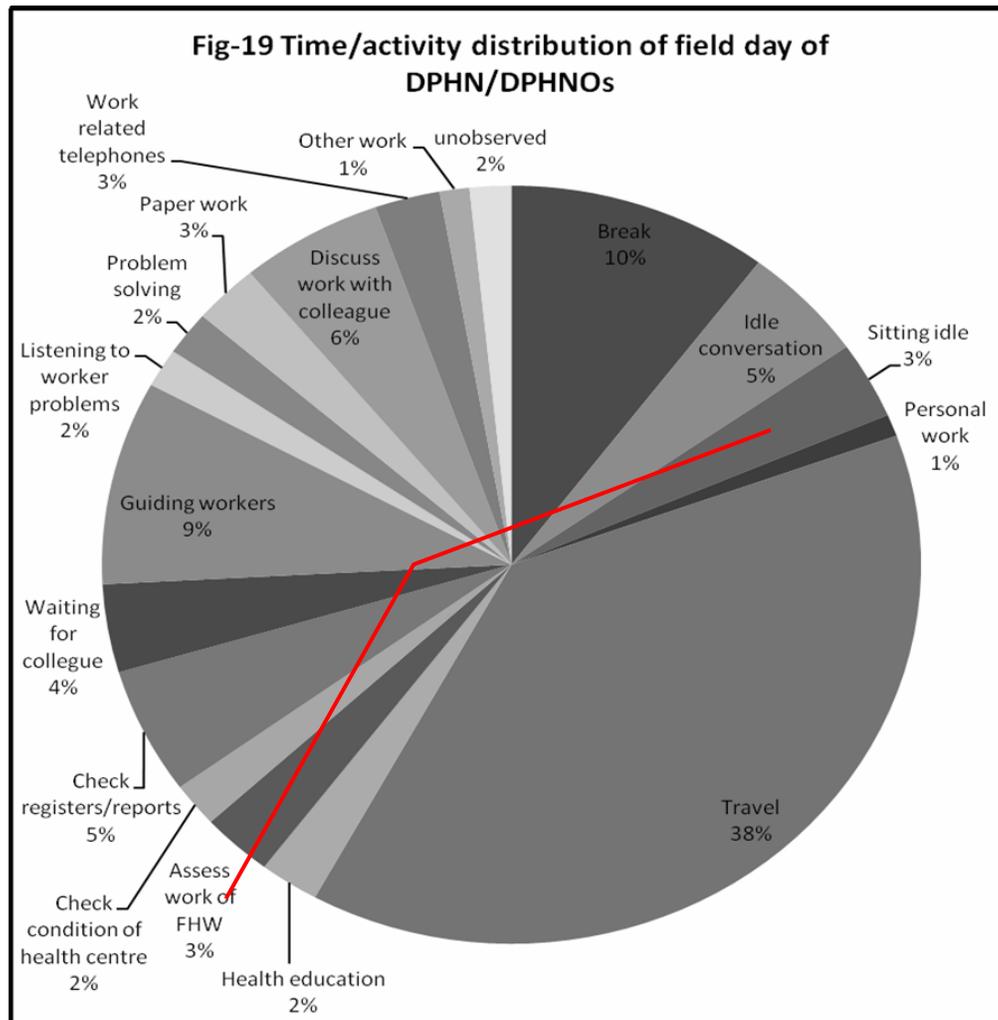
Most of the field visits were on Wednesday which is the Mamta Divas (village health and nutrition day). Out of the 12 Mamta Days scheduled during the observation period, they attended on 8 days. During this day, each subcentre holds antenatal clinics for pregnant women, immunization and growth monitoring of children 0-6 years with nutritional counseling. It has been made mandatory that the district officers including the DPHN/DPHNO monitor the quality of services on the Mamta day.

**Fig 10: Health workers monitored by DPHNs/DPHNOs**



During the Mamta Day the DPHNs/DPHNOs supervise the activities of the health workers, observe the quality of services and give technical inputs. They gave priority to checking the registers in terms of completeness of data. The quality of register is one of the criteria to judge the performance of the health workers. Eight different types of registers are filled at the sub centres, namely home visits, eligible couples, family planning, maternal and child health, malaria, medical stock, and birth and death register. The DPHN/DPHNO reported that they check just two among them; the Home Visit and the Maternal and Child Health registers. They fill out the supervisory checklist- details of the health centre like the population, availability of and maintenance of registers and records, achievement of service delivery targets, details of training programmes attended by staff the behavior of the service providers with the community are noted. Some of the DPHNs/DPHNOs also interact with the community to understand their perspective and provided health education to the mothers.

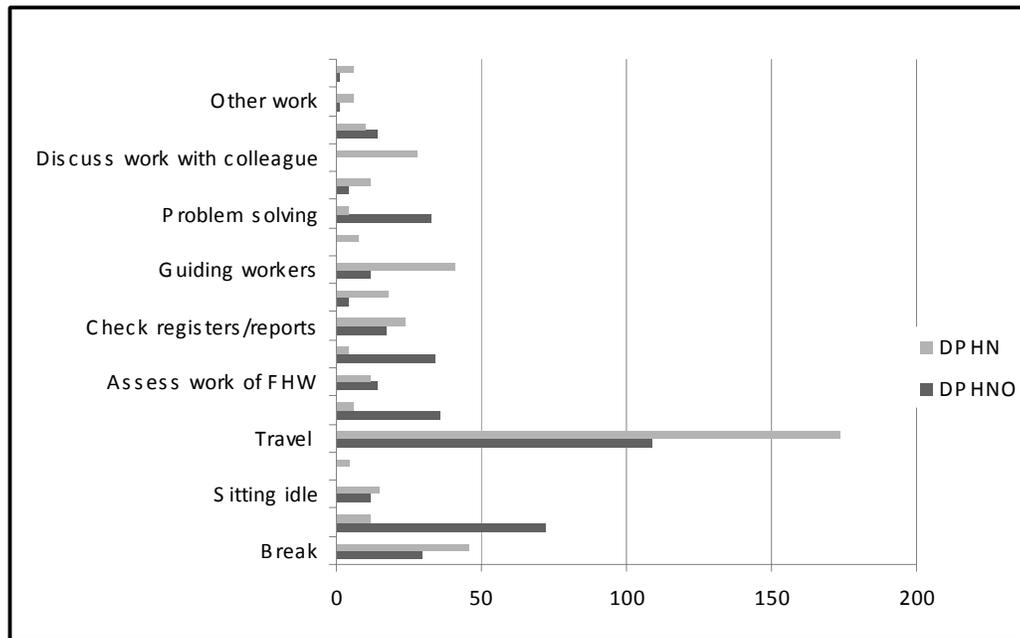
According to the job description of the PHNs the main responsibility of the DPHNs/DPHNOs is to guide and supervise the work performance of the field staff i.e. the Female Health Workers (FHWs), Female Health Supervisors (FHS), Block Health Visitors (BHV), Accredited Social Health Activist (ASHA), Trained Birth Attendants, Anganwadi Workers, Male Multipurpose Health Workers and other workers like Gram Arogya Mitra, and Community Based Health Volunteer. The work of Male Multipurpose Health Workers is not always checked by the DPHNs/DPHNOs because they feel that it's the responsibility of the Male Supervisor posted at the PHC (Fig-10).

**Fig-11 Time/activity distribution of field day of DPHN/DPHNOs**

In case of any kind of problem or feedback from the field they first try to settle it at the PHC level or block level with the help of Medical Officer of the PHC or the Block Health Officer and Block Health Visitor. The problem is communicated to the CDHO orally. Only in case of a serious problem a written communication is given. Observations show that as seniors they listen to the issues and problems of the workers, try to solve them on the spot and also give proper guidance which helps and motivate the workers to perform better in their work. Unlike office days where they have a lot of free time, free time (breaks, idle conversation and sitting idle) is only 19% of the total time during field days.

The DPHNOs spend comparatively more time in counseling mothers and families, supervision of FHWs during service delivery, checking working condition of health centre and solving problems of the workers on the spot (Fig-12). This may be because the DPHNO save considerable travel time on field days.

**Fig- 12: Comparison of time (minutes) /activity distribution of DPHN/DPHNOs on a field day**



#### e. Role of DPHNs and DPHNOs in the training programmes

The DPHNs/DPHNOs spend 21% of their time in training. They are trainers- some with the district in the District Training Team (DTT). Therefore they attend training of trainers (TOT) for almost all important national level programmes such as IMNCI, Immunization, Disease Surveillance. They organize trainings for the community level health workers as either coordinators or trainers. During the data collection, 4 out of the 10 DPHNs were involved in some form of training as trainers. They observed that the number of trainings have increased by quite a margin within the last 2 years since the implementation of National Rural Health Mission (NRHM). Only 3 DPHNs/DPHNOs had attended any training related to management and supervision.

The government of Gujarat has made computer training mandatory for its entire staff. They have selected a private computer training center in every district where the employees can take admission and learn basic computer proficiency. The fee is reimbursed to the agency by the government. Out of 13 DPHNs only one DPHN had taken advantage of this arrangement.

Though the DPHNs/DPHNOs attend many training they have very few opportunities to improve their skills in supervision, management and leadership. They also do not seem to have any role in follow up or assessing the effectiveness of training probably because this is not planned, they make informal assessment of the use of skills and knowledge gain after training.

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Availability:

Roughly a district has 350 FHWs, 50 FHSs and 6-7 Block Health Visitors which constitutes the largest technical human resource for health in a district. Having two posts of senior level public health nurses at the district that of the DPHN and DPHNO is not adequate to supervise, educate and monitor such a large workforce of public health nurses. In addition the study shows that many of these positions are lying vacant. If the DPHN/DPHNO were to visit each health centre/sub-center even once it could take them a year or more especially in large districts like Kutch, Jamnagar or Surat.

The eligibility for becoming DPHN/DPHNO is completion of a diploma in nursing education and administration. The study shows that the average gap of posting/promotion and completion of this diploma is 7 years. By the time the nurses get promoted after training, they do not remember much of the knowledge and skills acquired during training.

The majority of DPHNs are above 45 years and the DPHNOs are above 50 years of age which indicates that there has been very less new recruitment. By the time they get accustomed with the kind of duties they are supposed to perform, they are on the verge of retirement. Many reported having health problems with growing age which some admitted that age affected their work as they found it difficult to make visits to the field for supervision owing to ill health.

Ideally there should be 3-4 PHN posts for supervision of public health nurses. All the districts should at least have both the posts filled. The promotion to the post of DPHN should happen immediately after they complete their training. Older DPHNs with health problems should be given posting at District Training Centres, or as tutors at ANM schools, that is jobs which do not involve field visits and supervision in the districts while younger PHNs should be given supervisory duties.

### 5.2 Eligibility:

Though the DPHN's role at the district is to supervise nursing staff that are primarily doing public health work, the eligibility for admission in the PHN course is a diploma in general nursing and midwifery which is a qualification for posting as clinical staff nurses in hospitals. The staff nurses provide clinical service in hospitals which is very different compared to outreach services in a public health setup. As seen in the results only two PHNs from the study were ANMs earlier, the experience of which would be of great help in performing as a PHN.

The 10 month PHN course has since the last few years changed to Diploma in Nursing Education and administration instead of public health nursing. It is a combined training for becoming tutors in schools of nursing or ANMs schools as well as becoming DPHNs. Though the course includes 4 weeks of district supervision, the PHNs shared that this was not adequate for their role as DPHN. There is no induction training when they join the district. So the new PHNs take some time to get into the role of a DPHN.

In order to develop field oriented public health and supervisory skills, a separate 3-6 months field oriented public health course should be developed for promoted PHNs. The Female Health

Supervisors (FHS) are very well suited for this post. Therefore the FHS should also be allowed to take this new short course and be promoted as PHNs.

### 5.3 Role erosion and confusion:

The DPHN/DPHNO has three roles- administration, supervision and education. The job description has not been revised for several years. It is very broad and idealistic. It needs to be made more practical and task oriented in the present context of RCH and NRHM.

The study shows that there is confusion about the role of DPHNs and DPHNOs amongst themselves and their supervisors. Majority of them do not have a copy of their written job chart. Though the post of DPHNO is through promotion from that of a DPHN, their job descriptions are the same, only difference being that the DPHNOs get a higher salary. This creates confusions and differences amongst them. The DPHNOs think they are the supervisors of DPHN. But this has not been communicated to them from the state or their district supervisors. The DPHNOs do not make field visits very often and spend time in the office where they do not have much work to do. On a typical office day the DPHNOs on an average spend about 5 hours on non-work related activities. Thus they have a lot of idle time.

For several years they were responsible for compilation of performance statistics from the field every month, preparing district reports for submission to the state which took most of their time. Since the formation of District Project Management Units (DPMUs), this role has been largely taken over by the District Programme Coordinators leaving very little data compilation for the DPHNs and DPHNOs.

Most of the Chief District Health Officers with some exceptions are not aware of what the DPHN/DPHNOs are actually doing in the district. Very few see their monthly work-plan. Very few CDHOs demand any report of the field visits or take any action in case the DPHN takes the initiative to recommend some action.

Therefore there is a need to redefine the role of the DPHNs considering the changes in the district office due to formation of the DPMU. The new role of DPHN should include;

- a. Investigating all maternal and infant deaths, compiling MMR and IMR data for the district
- b. Systematic supervision of the Block health visitor and the female health supervisor
- c. Mentoring/training of community level workers such as the Accredited Social Health Activists (ASHAs)
- d. Maintain record of ANM/FHW staying at headquarters and help improve the facilities available at the subcentres
- e. Maintain community contact and help in health education/communication in resistant areas
- f. Be a resource person in the village health and sanitation committees

The job descriptions of DPHNs and DPHNO should be separate and clear. One option could be to divide the district into two parts to be supervised by the DPHN and DPHNOs, both reporting to the Additional Chief district health officer (ADHO)/Chief District Health Officer (CDHO). This would increase coverage, giving more time for quality supervision. There should be regular meetings with the CDHO and RCHO to plan and report the supervisory visits of the DPHN/DPHNOs.

#### **5.4 Observation of performed role:**

As shown by the study, out of total working time the DPHN/DPHNOs spend more time in the office (49%) and less than one third time in supervision. While in office they have considerable free time (30%).

Supervisory visits are planned randomly many times, although they are also guided by the CDHO/ADHO or guided by reported problems from the field. The field days are busier compared to office days. Maximum time is spent in travel (38%) during a field day which is because the DPHNs and DPHNOs do not have a vehicle assigned to them for field visits. They use public transport or visit only places where the other officers with allotted government vehicles have planned their visits. Otherwise they visit only those areas which are easily accessible through public transport.

The role of the DPHNs in guiding workers and solving their problems is perceived as useful by the PHNs and the workers. They are not required to submit a report of their visit or suggest any action for improvement in services. A short report is written only for settling of travel allowances. This means the DPHN/DPHNOs are not accountable for the performance of the field nursing staff. The field staff also knows that the DPHN cannot take any disciplinary action against them in case of poor performance.

The time spent in giving and receiving training (21%) is the time spent during implementation of the training. The observations do not show any time spent in follow-up after training to ensure performance improvement.

To conclude though the activities of DPHNs/DPHNOs include some administration, some supervision and some education as recommended in their job description, they are not given the administrative power, facilities and recognition due to which their role is marginalized in the district health system.

It is recommended that since the DPHNs have considerable free time in the office, their role should be expanded in field supervision to include for example investigating maternal and infant deaths, quality of services at the PHC, subcentres, especially in critical areas such as labour rooms and operation theatres. They should be provided vehicle support for field visits at least three days in a week. There could be a pool of vehicles at the district or vehicles could be hired for these days.

The DPHNs should prepare reports of their field visits. There should be follow-up meetings with the CDHO, RCHO, DPC based on these supervisory visit reports to take appropriate measures to improve worker performance, solve problems in supplies and infrastructure at the PHCs and the sub-centres. She should be given administrative authority on posting and transfers of ANMs and financial powers to solve minor problems at the sub-centre level.

#### **5.5 Skill gaps:**

Currently the DPHNs are involved in numerous training programmes for national health programmes but only as trainers of peripheral workers. Except for computer training there is no other training organized for developing newer skills and the professional growth of DPHNs. The observations showed that the DPHNs seem to have some skill gaps which affect their functioning, such as supervisory skills, management skills, leadership and team building. They also require

training in public health and health statistics, NRHM and health sector reform, and computer and MIS training. It is recommended that training programmes for developing these skills should be organized. A professional development course should be made mandatory for DPHNs every five years.

### **5.6 Status and recognition:**

The researchers observed that the presence or absence of the DPHN and DPHNO were not noticed in the district office many times. In majority of the cases they do not have an office like other officers of their level. They are given a table and chair in the administrative or other general wing of the district office. The other officers such as the malaria officer who is at the same hierarchical level as at least the DPHNO, has a separate office and a vehicle. The Female Health Supervisor is allotted a room at the PHC while many DPHNs who are supposed to be their supervisors do not have a room in the district office. This is an indication of lower status of DPHNs/DPHNOs in the district health office.

The possible causes of the low status could be that they are non-doctors, and not connected to any specific vertical programme such as tuberculosis or malaria. Gender could also be one of the reasons for their low status in the district health system.

The fact that DPHNs are the leaders of the largest health work force in the district they should be provided with a proper office, a government vehicle for atleast field visits. They should be made important members of all district level groups/committees for planning, implementing and monitoring health programmes at the district. Improving their status in the district office would have a positive effect on the morales and performance of the field level workers lead by the DPHN.

## **6. LIMITATIONS OF THE STUDY**

- a. Some activities have gone unrecorded as the researchers were not allowed to accompany the respondents, for example, in the review meetings.
- b. The presence of the researcher might have influenced the behavior of the respondents. As shared by her colleagues it was because of our presence that the respondents were regular, on time and careful not to spend time in non work activities as much as they normally do.
- c. For most of the field visits, the respondents managed to get government vehicles even though we insisted on following the regular schedule and using the mode of transport they usually used. Because of this, we feel that the time spent by them on travel during regular schedule would be more than what we have measured through this study. Also, the mode of transport might be public transport through the year rather than government vehicle which was the case during the period of study observation.
- d. Many times, the respondents were hesitant in giving answers to some questions. Therefore some answers may be partially true. The qualitative data was self-reported and not triangulated through other sources.

**REFERENCES:**

Academy of Nursing Studies (2005). *Situational Analysis of Public Health Nursing Personnel in India Based on national review and consultations in six states*. Pgs. 15, 19. Unpublished research report. Viewed on 26<sup>th</sup> October 2009. (

[http://www.whoindia.org/linkfiles/hsd\\_resources\\_situation\\_analysis\\_of\\_public\\_health\\_nursing\\_personnel.pdf](http://www.whoindia.org/linkfiles/hsd_resources_situation_analysis_of_public_health_nursing_personnel.pdf)).

American Public Health Association (1996). *The definition and role of public health nursing: a statement of the APHA public health nursing section*. March 1996 update, Washington, DC.. Viewed on 26<sup>th</sup> October 2009. (

[http://www.dhss.mo.gov/LPHA/PHNursing/DefinitionPHN\\_%20R\\_04.htm](http://www.dhss.mo.gov/LPHA/PHNursing/DefinitionPHN_%20R_04.htm))

Bamisaiye, A A (1984). A simple work-sampling system for use in hospitals and health centres in the developing world. *Journal of tropical pediatrics*. 30 (6): 299-303.

Ministry of Health and Family Welfare, Government of India (2007). *Bulletin on rural health statistics in India 2007*. Viewed on 15<sup>th</sup> April 2009.

(<http://mohfw.nic.in/RHS%20Bulletin%20March%202007%20-%20Tables.pdf>)

Brian Price (1989). Frank and Lillian Gilbreth and the Manufacture and Marketing of Motion Study, 1908-1924. *Business and economic history*. Vol.18: 88-98.

Planning Commission, Government of India. *2<sup>nd</sup> Five Year Plan (1956-1961)*. Viewed on 27<sup>th</sup> October 2009. (<http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html>)

Kartikeyan S, Chaturvedi A R (2009). *Essentials of Health Management. Fundamentals of management*. Bhalani publishing house, Mumbai. 25-26.

Ministry of Health, Government of India (1959). *Mudaliar committee report*.

Ministry of Health, Government of India (1946). *Bhore committee report*.

Nursing Journal of India (1942). Mainly for health visitors. A talk by doctor Kumares Bannerjee, Medical Officer, Reliance Jute Mills. 30 ( IX): 244.

Nursing Journal of India (1930). Health Visitors' League section. 21(VII):151.

Wilkinson A (1958). *A brief history of nursing in India and Pakistan*. Trained Nurses Association of India. 48-52, 57-64.