

# STUDY OF IMPACT OF ICDS IN KARNATAKA

**MODE**

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**Client : UNICEF, Hyderabad**  
**Dept. of Women and Child Development**  
**Karnataka, Bangalore**

**JN : 27004**



**PROJECT DETAILS**

Project Title : Impact of ICDS in Karnataka

Study sponsored by : UNICEF Hyderabad  
Dept. of Women and Child Development,  
Govt. of Karnataka, Bangalore

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## **FOREWORD**

Integrated Child Development Services (ICDS), launched in 1975 in 33 blocks of the country on experimental basis, is one of the largest and most unique outreach programmes for early childhood care and development. ICDS is a powerful outreach programme designed to promote holistic development of children under six years, helps in achieving major national nutrition and health goals listed in the National Plan of Action for children, 1992.

In Karnataka, ICDS has been in operation for more than two decades, and provides a package of services which includes Supplementary nutrition, Immunisation, Health checkups, Referral services, Preschool Education and Nutrition and Health Education (through house visits and group sessions).

In Karnataka, an innovative refresher training programme aimed at enabling the AWWs to respond to the emerging programme thrusts, was experimented. The main features of the innovative refresher training programme include participatory approach, field level staff playing the role of trainers, decentralisation of field based training and team building, and focus on joint analysis of field situation and experiences.

The present study commissioned by UNICEF, Hyderabad and Dept. of Women and Child Development, Bangalore, is aimed at assessing the impact of the ICDS programme with specific reference to the innovative refresher training imparted to the AWWs.

The study has been carried out in 80 projects/blocks across the state of Karnataka (covering all the districts) with the target group being functionaries of ICDS and health department, mothers, community leaders, Zilla/Taluk Panchayat Presidents, Chief Executive Officers and senior district officials (AD/PO).

Field work for the study was conducted during December 1997-February 1998. At various stages of the study, we received full cooperation and support from UNICEF Hyderabad and Department of Women and Child Development, Government of Karnataka, Bangalore. Particularly we wish to thank Sri S C Bhargava, Dr. S K Chaturvedi, Sri Muchandi and Dr Deepika of UNICEF and Smt. Lata Krishna Rao, IAS, Sri Shankar Narayana, Ms Prema Kumari, Ms Banu of the DWCD, Bangalore for their unlimited support, cooperation, suggestions and guidance at every stage of the study.

The field work could be completed smoothly due to the cooperation and support extended by the government officials / functionaries at state, district, block and sector level. We wish to thank them all.

We wish to extend our gratitude to all the respondents - mothers, community leaders, AWWs and other functionaries - for sparing valuable time to provide the information needed to achieve the objectives of the study.

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**MODE**

**CHAPTER - 1**  
**INTRODUCTION**

## 1.1 ICDS

Integrated Child Development Services (ICDS), launched in 1975 in 33 blocks of the country on experimental basis, is one of the largest and most unique outreach programmes for early childhood care and development. With a recognition that early childhood development constitutes the foundation of human development, ICDS is designed so as to promote holistic development of children under six years.

ICDS is a powerful outreach programme which helps in achieving the major national nutrition and health goals listed in the National Plan of Action for Children, 1992. The programme contributes to the national goal of universal primary education also through early childhood education.

ICDS provides increased opportunities to promote early development, associated with improved enrollment, retention in the early primary stage and by releasing the girl children from the burden of care of siblings which enables them to get the benefit of primary education.

Objectives of the ICDS programme are as follows :

- \* To improve the nutritional and health status of children below six years of age
- \* To lay the foundation for proper psychological, physical and social development of the child
- \* To reduce the incidence of mortality, morbidity, malnutrition and school dropouts
- \* To achieve effective coordination of policy and implementation among various departments to promote child development
- \* To enhance the capability of the mother to look after the normal health and nutritional needs of child through proper health and nutrition education

In addition to children below six years of age, ICDS takes care of the essential needs of the pregnant women and nursing mothers residing in socially and economically backward villages and urban slums.

ICDS, which has been in operation for more than two decades, is striving to achieve the aforesaid objectives, with a package of services which includes :

- Health
  - Immunisation
  - Health checkups
  - Referral services
  - Treatment of minor ailments
- Nutrition
  - Supplementary feeding
  - Growth monitoring and promotion
  - Nutrition and health education (NHED)
- Early childhood care and pre school education to children of 3-6 years
- Convergence of other Supportive Services

Each of the above is described briefly below :

### Immunisation

Immunisation of infants / children against six vaccine preventable diseases, viz., tuberculosis, poliomyelitis, diphtheria, pertusis, tetanus and measles protects them from these six killer diseases which are major preventable causes of child mortality, disability, morbidity and related malnutrition.

Immunisation of pregnant women against tetanus helps in reducing maternal and neo natal mortality.

Immunisation of infants and expectant mothers is provided by the health functionaries at PHC and Subcentre in accordance with the national immunisation schedule.

The Anganwadi worker assists the health functionaries in :

- Coverage of the target population for immunisation
- Organisation of fixed day immunisation sessions
- Maintenance of immunisation records and follow up to ensure full coverage



### Health Checkups

The service of health checkups includes :

- health care of children below 6 years
- antenatal care of expectant mothers
- post natal care of nursing mothers

At the AWC, children, adolescent girls, pregnant women and nursing mothers are examined at regular intervals by the MO, LHV and ANM.

The AWWs provide a link between the village and the sub centre or PHC. The service of health checkups is aimed at reducing complications during pregnancy and reducing prenatal mortality.

### Referral Services

Referral services are provided by the AWW to the children and mothers who need prompt medical attention. The AWW has been oriented to identify the children and mothers needing referral service and refers them to the referral centre / hospital or PHC.

### Supplementary Feeding

Supplementary feeding is provided to children below 6 years of age, pregnant women, nursing mothers and adolescent girls from low income families in the AWC area identified through a house to house survey. By providing supplementary feeding for 300 days in a year, ICDS tries to bridge the gap between national recommended intake and actual intake of children and women from poor and disadvantaged communities.

The supplementary feeding programme of ICDS aims at supplementing the family food only and not at substituting for family food.

Supplementary food is provided to pregnant women and nursing mothers (upto six months of nursing) to help in meeting the enhanced requirements during the period of pregnancy / lactation.

### Growth Monitoring and Promotion

Growth monitoring and nutrition surveillance are the important activities of the AWW which are crucial for assessing the impact of the health and nutrition related services.

At the AWC, children below 3 years of age are weighed every month and children of 3-6 years are weighed every three months. The AWW maintains weight for age growth charts for all the children below 6 years. These growth charts help in detecting growth faltering and assessing their nutritional status.

The AWW identifies the severely malnourished children (in Grade III and IV) and provides special supplementary food which may be therapeutic in nature or double ration and refers them to health centre or hospital.

### Nutrition and Health Education

Nutrition and Health Education (NHED), a key activity of the AWW, is aimed at capacity building of women so as to enable them to look after their own health and nutrition needs as well as that of their children and families.

Under NHED, basic health and nutrition messages related to child care, infant feeding practices, utilisation of health services, family planning and environmental sanitation are given to the women through group sessions, house visits and demonstrations.

### Pre School Education

Early childhood care and pre school education, provided under the ICDS, focuses on the total development of the children. The Preschool education programme is directed towards providing and ensuring a natural, joyful and stimulating environment with emphasis on necessary inputs for optimal growth and development of the child.

The preschool education programme, conducted through the medium of play, aims at providing a learning environment for the promotion of social, emotional, cognitive, physical and aesthetic development of the child. The ECCE component of ICDS also contributes to the universalisation of primary education, by providing to the child the necessary preparation for primary schooling and offering substitute care to the younger siblings, thereby freeing the older ones (especially girls) to attend school.

### Convergence of Services

ICDS provides convergence of other supportive services such as safe drinking water, environmental sanitation, women's empowerment programmes, non formal education, and adult literacy.



## **1.2 INNOVATIVE REFRESHER TRAINING**

Refresher Training of Anganwadi Workers (AWWs) is aimed at keeping the skills upgraded besides orienting them towards the latest developments in the field. Till 1982, there was no provision for organising refresher training programme for AWWs. In 1983, the first ever one day special reorientation programme for AWWs who had worked for at least two years in the ICDS was organised. Refresher Course in Preschool education for the AWWs across the country followed this.

In 1986, a 14 day (11 working days) Refresher Course for AWWs who had worked for at least 2 years after receiving the initial training was introduced. Subsequently, the duration of this training was enhanced to 18 days (14 working days).

Review of the training status of the AWWs across the state of Karnataka indicated a heavy backlog of AWWs to be covered for training and inability of the Anganwadi Training Centre (AWTC) to undertake the retraining of these AWWs due to their pre occupation with the task of organising job training of workers.

In the light of the above, the Government of Karnataka proposed an innovative refresher training programme, wherein all the AWWs of the state would receive refresher training within a period of 2-3 years in their own district, by the District level core training teams in a decentralised manner.

The innovative refresher training programme is aimed at enabling AWWs to respond to the emerging programme thrusts so as to achieve the stated goals for improved child nutrition and health status.

For imparting the training, district level core teams, consisting of ICDS field personnel (with their rich field experience), were constituted instead of the conventional trainers.

Main features of the innovative refresher training programme are as follows :

- \* Against the conventional refresher training syllabus covered in 18 days, a condensed course is followed for a duration of 6 days. The curriculum, based on the needs of the grass root level workers was evolved through consultations and workshops with the active participation of the field level staff, academic institutions, training institutions etc.
- \* The training was imparted by a group of field level staff at various levels from ICDS as well as health department.

In each district, a group of five trainers, consisting of Assistant Director, CDPO and Supervisor from ICDS and Medical Officer from Health and one instructor from AWTC was raised. All the core group members were trained by NIPCCD for one week with the focus on orientation to the curriculum and methods of training.

- \* The refresher training was imparted at district level.
- \* The curriculum, developed in consultation with the ICDS functionaries, including AWWs, concentrates on the field operations and areas where AWWs need special inputs.
- \* In order to supplement for the training, training material have been translated to Kannada and the same was distributed among the trainers as well as trained AWWs.

The innovative refresher training programme was implemented in two phases. In the first phase, the training programme was implemented, on an experimental basis, in 4 districts, viz., Bellary, Gulbarga, Dakshina Kannada and Shimoga. In the second phase, the training programme was implemented in rest of the districts of the state, on the basis of the positive feedback provided by the NIPCCD's evaluation study.

The refresher training programme, designed by the Department of Women and Child Development with NIPCCD's cooperation and UNICEF's assistance had covered 26,500 of the 39,985 AWWs of the state (during 1994-1997).



**CHAPTER 2**  
**OBJECTIVES**

## 2.1 OBJECTIVES

A need to conduct a study to assess the impact of the ICDS Programme with specific reference to the innovative refresher training imparted to the AWWs during 1994-1997, was felt by the DWCD and UNICEF.

Hence, the present study was undertaken by MODE with the following specific objectives :

- \* To assess the impact on health and nutrition status of children (below 6 years of age)
- \* To assess the impact of early childhood (preschool) education on primary school enrollment
- \* To find out the impact on women's knowledge and awareness of health and child care practices
- \* To assess the impact on coordination and convergence of services
- \* To assess the impact on community participation
- \* To suggest corrective actions.

**CHAPTER 3**  
**METHODOLOGY**

### **3.1 SAMPLING DESIGN**

In order to get an unbiased assessment of the situation, selection of the respondents - functionaries and beneficiaries - was done using a multi stage stratified random sampling design which is explained below :

#### **Selection of Blocks**

Firstly, the total number of ICDS blocks or projects were divided in to six zones, viz., North, South, Central, Coastal, Tribal and Urban, on the basis of geoethnic characteristics like location within the state, extent of tribal population etc.

80 projects were selected across the six zones. Number of projects selected in each zone was in proportion to the total number of projects in the zone. The list of the 80 projects/blocks selected in consultation with UNICEF and Department of Women and Child Development, is given in Appendix.

#### **Selection of AWW/AWC**

Total coverage of AWWs was 2650 which is 10 per cent of 26,500 the total number of AWWs trained (as specified in the TOR). This sample was equally divided amongst the 80 chosen projects.

The selection of AWWs within each project/block was done by systematic random sampling using distance from the project headquarters as the criteria. That is, all the centres in the project were arranged in ascending order on the basis of distance from the project headquarters and then the required number of AWCs were selected by systematic random sampling technique. This includes AWWs who received the innovative refresher training as well as those who could not receive the innovative refresher training.

#### **Selection of Functionaries**

All the CDPOs of the selected projects got self selected for the interviews. From each project, 2 supervisors were selected and interviewed. District level officials like Assistant Director, Programme Officer available in the districts visited were covered for qualitative in depth interviews.



**Selection of Beneficiaries**

Quantitative survey among mothers was carried out in 160 villages - 2 per project. And in each village, 10 mothers with a child below 6 years of age were selected using the list of such mothers generated from the Family Survey Register maintained by the AWW as the sampling frame. The selection was done with systematic random sampling technique.

**Selection of Community Leaders**

From each project, two community leaders were selected for the qualitative in-depth interview. The sample consisted males as well as females.

**3.2 COVERAGE**

Table 3.2a gives the number of functionaries and beneficiaries covered in the study by research technique

**Table 3.2a Coverage**

Respondent	Research Technique	Target	Achieved	Reason for shortfall
AWW	Structured interview	2650	2665	Vacancy Vacancy -
AWW	Part observation (7days)	5	5	
AWC	Scanning of records	2650	2665	
Supervisor	Structured interview	160	144	
CDPO	In depth interview	80	74	
PO <sup>+</sup>	In depth interview	-	7	
AD <sup>+</sup>	In depth interview	-	18	
CEO <sup>+</sup>	In depth interview	-	8	
AWTC <sup>+</sup>	In depth interview	-	18	
ANM/LHV <sup>+</sup>	In depth interview	-	25	
MO <sup>+</sup>	In depth interview	-	5	
Community				
Leader	In depth interview	160	160	
ZP/TP President <sup>+</sup>	In depth interview	-	12	
Mothers	Structured interview	1600	1606	

<sup>+</sup> Additional coverage, not envisaged in the proposal. Added as suggested by the department.

### 3.3 RESEARCH METHODS

The research techniques used in the study include structured interviews, in depth interviews and participant observation.

Structured interviews are one to one interviews carried out with the help of a structured questionnaire, with possible codes provided and a few open ended questions.

In-depth interviews are one to one free flowing interviews carried out with the help of a guide which lists out the various issues to be covered in the interview.

Participant observation involves recording through observation while the functionaries are performing different activities like in centre activities, house visits, NHED sessions, meetings etc. One investigator was attached to one Anganwadi Centre for a period of 10 working days from morning to evening.

The various research instruments used in the present study are listed below :

1. AWW Questionnaire
2. Supervisor Questionnaire
3. CDPO Questionnaire
4. Parents Questionnaire
5. In depth guide - Community Leader
6. In depth guide - Asst. Director/PO #
7. In depth guide - ANM/LHV/MO#
8. In depth guide - AWTC Functionaries#
9. In depth guide - Zilla / Taluk Panchayat President #
10. Observation recording sheet - AWW#

# All these instruments were in addition to those envisaged in our proposal.  
Added as suggested by the Department

Drafts of all the research instruments were submitted to UNICEF and the Directorate of Women and Child Development department. The instruments were finalised after incorporating all the changes based on the discussions with UNICEF/Department and pretesting in the field.



### **3.4 FIELD OPERATIONS**

Five teams, consisting of 6 field investigators and 1 supervisor each, were raised. Intensive training was imparted to these teams at MODE's Bangalore office during December 5-15 1997. During the training, class room instructions, field visits, interviewing and scrutiny were organised so as to make the investigators totally efficient in the data collection process. All efforts were made to maintain uniformity in imparting training by using the Kannada version of the questionnaires and field manual with clarifications for the questionnaires. This helped in controlling non sampling errors.

Actual field work was started on December 23, 1997 and went on till February 6, 1998. The field work was delayed due to legislative council elections and strike by the state government employees.

All the interviews were administered in Kannada, the mother tongue of the respondents.

Senior research and field professionals from MODE made field visits at regular intervals during the field work. Purpose of the field visits was to make on the spot assessment of the ground realities and monitor the quality of data besides giving clarifications needed at the field level. They also interacted with the functionaries at various levels as well as beneficiaries.

### 3.5 DATA ANALYSIS

The qualitative in depth interviews were analysed by the process of content analysis. In addition, frequency tabulation was carried out for some key measures, to get a gross level perspective.

The quantitative questionnaires were computer analysed. All the questionnaires were scrutinised, translated and coded (in case of open ended questions), given for data entry with MODE's regular vendor and processed on MODE's in house pentium machines.

The analysis was carried out through tailor made software developed by MODE's software specialist.

Analysis of the data from AWWs and Parents interviews was carried out by the training status of the AWW. These results will be presented in the report for the AWWs who received training and who could not receive the training so as to capture the differences in the performances of trained and untrained AWWs.

The results are presented in the form of frequency distributions and cross tabulations. Wherever possible, Statistical tests of significance (eg. Z test, for large sample) are applied so as to test the significance of the difference observed between different values. Z value of 1.96 or more indicates that the difference observed is statistically significant at 5% level of significance and the difference can be considered as insignificant if the z value is less than 1.96.



**CHAPTER 4**  
**ANGANWADI WORKER**

## **4.1 PROFILE**

Anganwadi is the focal point for delivering the package of services envisaged in the ICDS Project. An anganwadi centre (AWC) is set up, on an average, for a population of 700 in tribal areas and for a population of 1000 in rural and urban areas. A local female Anganwadi Worker (AWW) runs the AWC with the help of a local helper.

Profile of the AWWs in terms of key socio economic characteristics is presented in Table 4.1a.

Table 4.1a indicates that about half of the AWWs are from other or forward castes while about one fifth belong to SC/ST groups. Four out of five AWWs have completed 10th standard and this is a good sign which indicates that the criterion regarding educational qualification was being met at the time of recruitment, in most of the cases.

The age distribution of the AWWs represents a middle age structure among the AWWs. Mean age of the AWWs was observed to be 31 years.

Majority of the AWWs (69%) were currently married and about one fourth were never married at the time of the survey. Proportion of widows/divorcees was small.

Two out of every three AWWs reported to be staying in the AWC village. That is, one third of the AWWs stay in a nearby village. They travel an average distance of 5 kms (one way) in a day to reach the AW centre.

The recruitment policy which emphasises selection of local candidates seems to be not being adhered to at the time of recruitment as about one third of the AWWs reported to be not staying in the AWC village.

According to the Senior District Level Officials, the recruitment of AWWs is done by a committee consisting of officials like DS (Chairman), CDPO (Secretary), AD (member) and 3 non officials (Taluk Panchayat President and 2 local representatives).

The recruitment policy specifies the following criteria for selecting AWWs :

- Should be of 21-45 years of age
- Should be selected from within the village/local community (to be supported by nativity certificate, ration card, voters list, etc.)
- Should be acceptable to the local community
- Should be able to work with women and children from SCs, STs and other weaker sections of the community
- Should have completed 8th standard

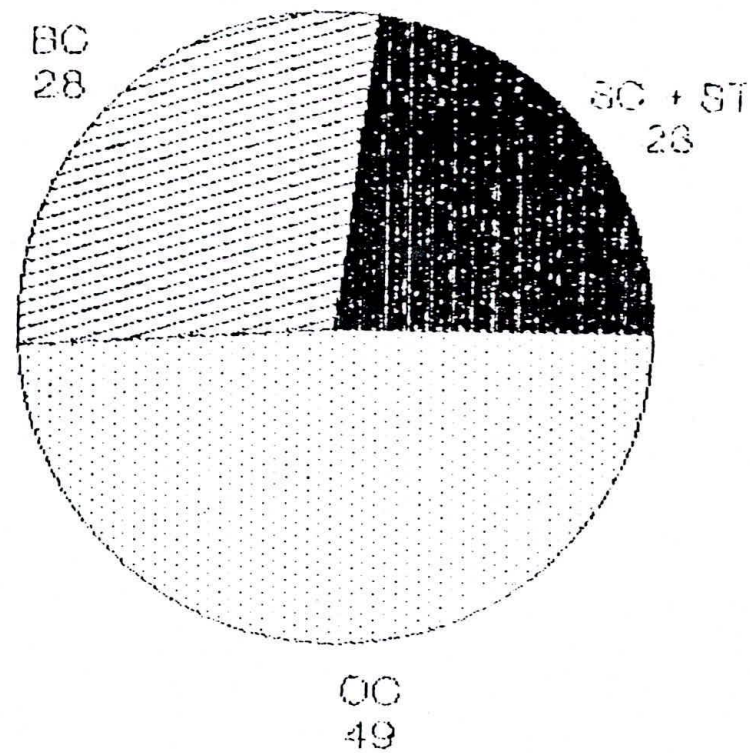
The officials are, by and large, satisfied with the recruitment policy. But some of them were concerned about the political interference in the selection process. And they suggested that the candidate who is interested to work, dedicated and needy (say widow, divorcee etc.) be given preference. In spite of the selection criterion regarding local residence of the candidate, more often we find many AWWs who do not belong to the AWC village. The officials attribute this to the interference of the local politicians who insist that the candidate suggested by them should be selected irrespective of the residential status of the candidate. This brings out the necessity for making the recruitment policy free from political interference.

Table 4.1 a Background Characteristics of AWWs

<u>Caste</u>	<u>% AWWs</u>
SC	16
ST	7
BC	28
OC	49
<u>Education</u>	
Upto 7th	2
8th - 9th	20
10th & above	78
<u>Age (Yrs)</u>	
< 30	48
30-49	50
50+	2
MEAN	31.4
SD	7.1
<u>Marital Status</u>	
Unmarried	26
Married	69
Widow / Divorcee / Separated	5
<u>Residence</u>	
AWC Village	68
Total No. of AWWs	2665
<u>Distance from residence to AWC (Kms)</u>	
MEAN	5.2
SD	5.0
Total No. of AWWs not staying in AWC village	793



Fig.4.1 Caste Distribution of AWWs



**Fig 4.2 EDUCATION STATUS OF AWWs**

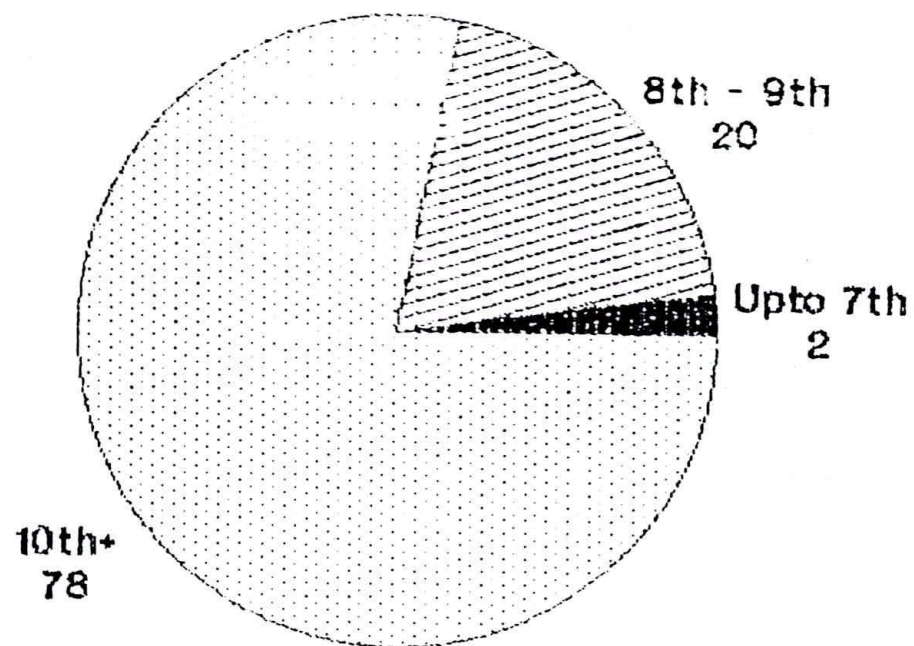
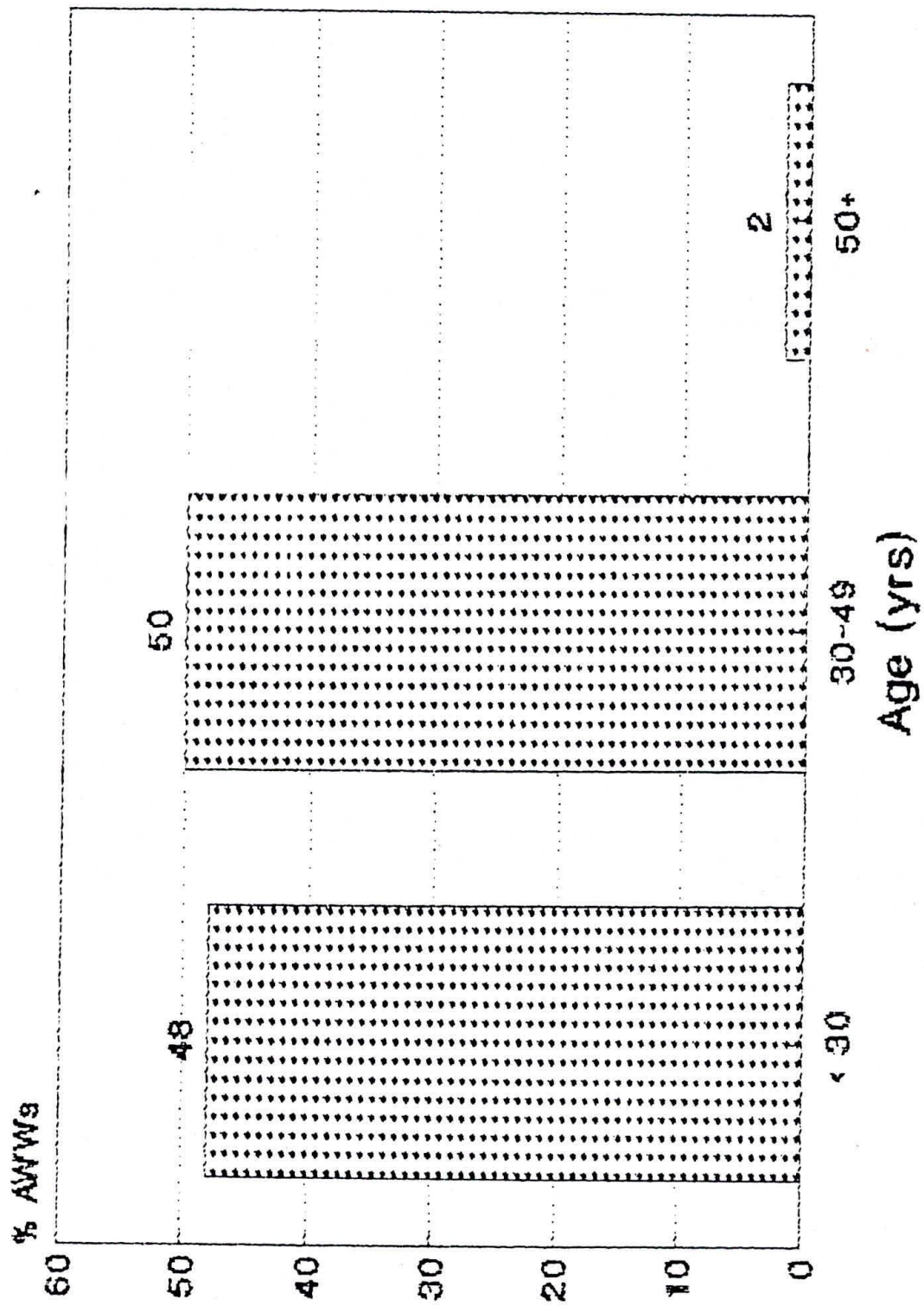


Fig 4.3 AGE DISTRIBUTION OF AWWWS





## 4.2 JOB PERFORMANCE

All the AWWs were asked about the different activities they are supposed to carry out as AWW. Analysis of the spontaneous responses of the AWWs is presented in Table 4.2a.

Pre school was mentioned by almost all the AWWs while house visits, meetings, immunisation and supplementary feeding were mentioned by more than 70 per cent of the AWWs. These are the services on top of the mind of the AWWs. Of the remaining services, Nutrition and Health Education, recording work and weighing of children were mentioned by about 40 to 50 per cent of the AWWs. Rest of the services were mentioned by a small proportion of the AWWs. As the data presented pertains to the spontaneous response of the AWWs, it can not be concluded that rest of the services are not being carried out by the AWWs.

Table 4.2a Activities Supposed to be carried out  
(Stated response of AWWs)

(% AWWs)

Activities	Trained	Untrained
Pre school	98	98
House visits	86	86
Meetings	77	71
Immunisation	74	73
Supplementary feeding	70	69
NHED	52	48
Recording work	45	45
Weighing of children	43	41
Ante natal services	37	35
Identifying referral cases	21	18
Plotting of weights	16	12
Referral follow up	11	11
Community mobilisation	10	9
Mahila Mandal	8	7
Total No. of AWWs	1485	1180

Spontaneous response

Note : Total exceeds 100 due to multiple response



**To sum up**

AWWs come from all caste groups with majority belonging to the other castes. Majority of them studied at least upto 10th standard, middle aged, currently married and stay in AWC village. In spite of the stipulation that the AWW should be a local woman, not all AWWs stay in the AWC village.

**CHAPTER 5****HEALTH AND NUTRITION STATUS OF CHILDREN BELOW 6 YRS**

The refresher training provided to the AWWs is expected to improve the health and nutrition status of the children of 0-6 years of age. Attempts were made in the present study to assess the health and nutrition status of the children from the villages with trained AWW and untrained AWW. These results are discussed in this chapter.

## **5.1 IMMUNISATION**

### **AWW's Response**

Provision of immunisation to the child so as to protect him/her from the six killer diseases - TB, Polio, Diphtheria, Pertusis, Whooping cough and Measles - is a function of the AWWs. Immunisation service is provided by the AWWs with the help of the health functionaries like ANM.

Almost all the AWWs reported provision of immunisation as a job function. However, 8 to 9 per cent of the AWWs reported that they are not able to provide immunisation to all the children in the target group (Table 5.1 a). This was mainly attributed by the AWWs to lack of cooperation from the mothers.

All the AWWs were asked about the immunisation coverage figures (when it was last organised). The AWW's response was verified with the entries in the relevant registers / records. The results are presented in Table 5.1a. In six AW centres - 3 with trained AWW and 3 with untrained AWW - less than half of the children were immunised. Further probing about the reasons for not being able to cover all the children for immunisation, revealed that non availability of the mother, sickness of the child and lack of cooperation from the mothers were the major constraints.

More than half of the AWWs reported the coverage of immunisation as 100 per cent. Proportion of such AWWs was higher among the trained AWWs, compared to their counterparts who could not receive the refresher training. The difference between the trained and untrained AWWs was found to be statistically significant. Thus immunisation coverage figures were significantly higher in the centres with trained AWWs indicating their better performance.

Only 60-65 per cent of the AWWs reported the immunisation coverage to be above 90 per cent. In the remaining centres, not all the children could receive the immunisation vaccine they had to receive



Ensuring that all the children receive full schedule of the immunisation is an action area because of the gaps in proportion of children immunised.

About two third of the AWWs reported that all the children of 0-5 years received the pulse polio drops on December 7, 1997. In all the centres, at least half of the children received the pulse polio drops. Pulse Polio coverage was significantly higher in the centres with trained AWWs compared to those with untrained AWWs. (Table 5.1a).

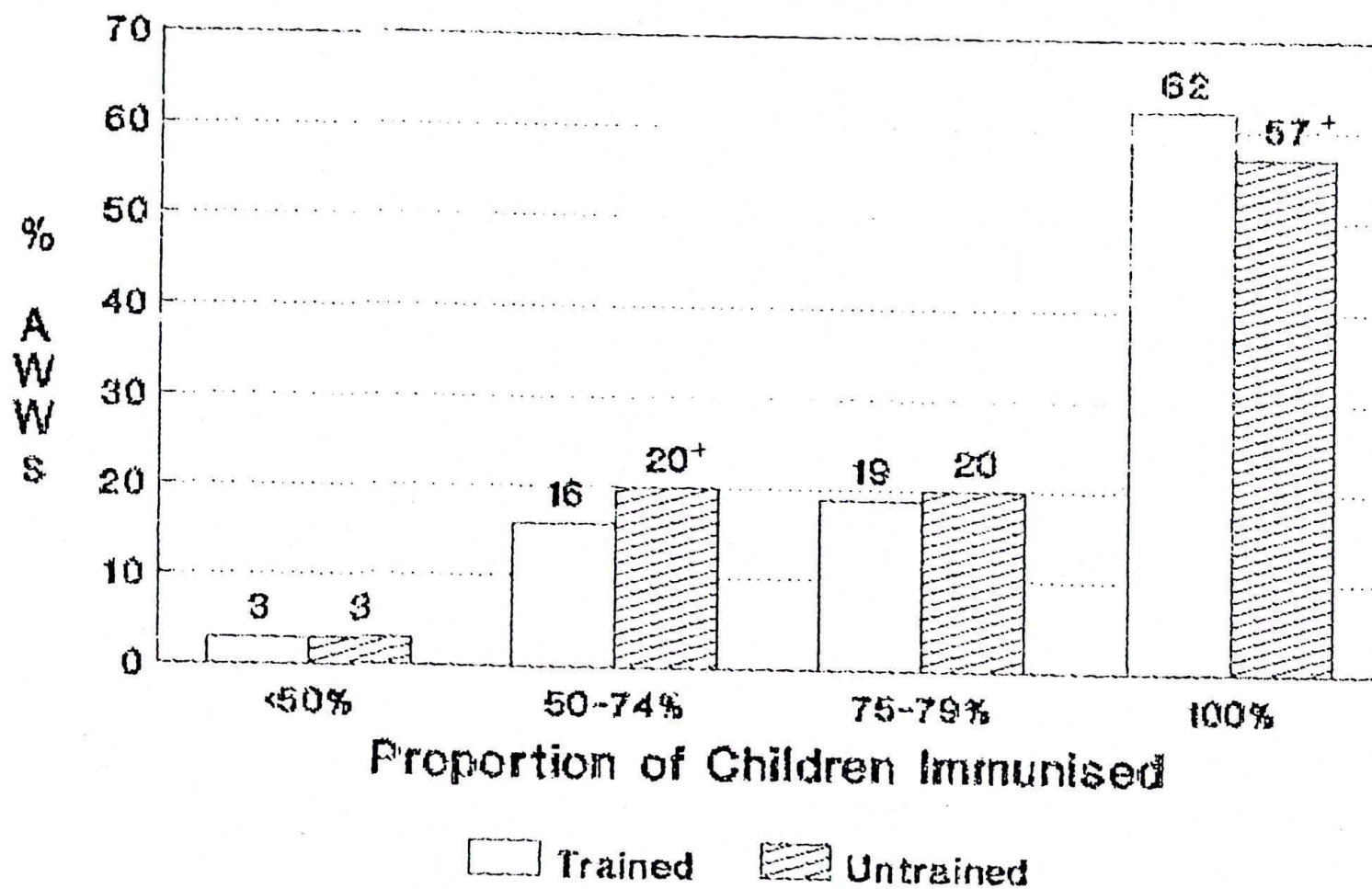
Table 5.1a Immunisation Coverage

(% AWWs)

	Trained	Untrained
<u>Whether able to do</u>		
Yes	92	91
No	8	9
Total No. of AWWs reported Immunisation as activity	1101	863
<u>Proportion of children immunised (last month)</u>		
< 25%		
25 - 49%	1	1
50 - 74%	2	2
75 - 89%	16	20 (z = 5.18)*
90 - 99%	16	17
100%	3	3
	62	57(z = 5.05)*
Total No. of AWWs organised immunisation	1392	1079
<u>Proportion of children given Pulse Polio (DEC '97)</u>		
50 - 74%	2	3
75 - 89%	7	8
90 - 99%	23	22
100%	67	65 (z = 2.18)*
No response	1	2
Total No. of AWWs	1485	1180

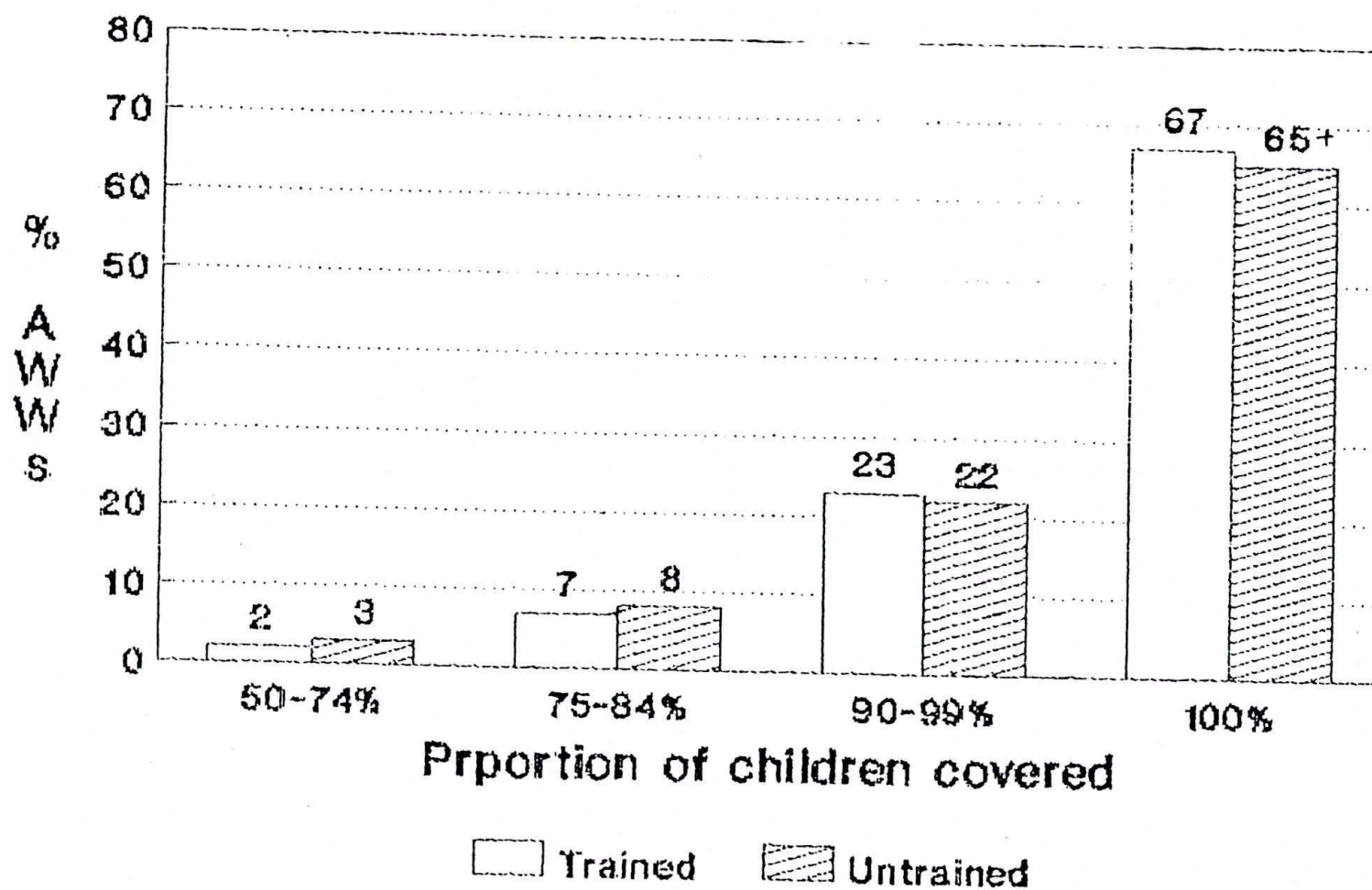
\* Significant at 5% level of significance.

Fig.5.1 Immunisation Coverage



<sup>+</sup> Significant at 5% level of significance

# Fig.5.2 Pulse Polio Coverage



+ Significant at 5% level significance



## 5.2 REFERRAL SERVICES

Anganwadi worker (AWW) is expected to identify the malnourished and sick children needing referral service and refer them to the nearest health centre / hospital. Provision of referral services is another important service provided under ICDS.

All the AWWs were asked a few questions to assess the extent of referrals and understand the kind of cases referred by them. Results are presented in Table 5.2a

About one third of the AWWs did not refer any child during the 3 months period preceding the survey.

On an average, 3.5 and 2.9 children were referred by the trained and untrained AWWs respectively during the 3 months period before the survey. Performance of the trained AWWs regarding the referral services seems to be significantly better compared to those who could not receive the training. The trained and untrained AWWs could not refer, on an average, 1.6 and 2.3 potential cases respectively (during the 3 months period before the survey). This indicates that the needy people are by and large referred to the referral centres by the AWWs. But the referral service is being effectively provided by the AWWs who received the innovative refresher training.

On being further probed about the reasons for not being able to refer these potential cases, the AWWs mentioned about the constraints listed below :

- financial problems of parents
- lack of knowledge among parents (about referral service)
- less importance given by parents

Senior functionaries also reported about the aforesaid problems.

The suggestions given by the functionaries include provision of funds (towards TA for patient as well as parents) and special treatment/recognition to the patients referred by the AWW. Availability of the Medical Officer (Doctor) at the referral centre and proper attention paid by him/her will also have positive influence on the utilisation of referral services.

Table 5.2a No. of children referred

(% AWWs)

	Trained AWW	Untrained AWW
<u>Number of children referred (last 3 months)</u>		
None	33	37
1 - 5	56	55
6 - 10	8	7
11+	3	1
Mean	3.5	2.9 (z = 8.63)*
Total No. of AWWs	1485	1180
<u>Cases referred</u>		
Malnutrition	35	36
ARI	22	25
Diarrhoea	43	39
Total No. of AWWs referred children	991	744
<u>No. of cases could not refer</u>		
Mean	1.6	2.3 (z = 2.03)*
SD	1.4	2.1
Total No. of AWWs who could not refer	61	51

\* Significant at 5% level of significance



### 5.3 NUTRITION STATUS OF CHILDREN

Reduction in the levels of malnutrition is one of the key objectives of the ICDS programme. To find out the malnutrition levels among the children, the relevant information was collected from all the AWCs through scanning of records. Analysis of this data is presented in Table 5.3a.

Analysis presented in Table 5.3a reveals that about 5 to 8 per cent of the children were malnourished and more than one third of the children across the various age groups were in normal grade of nutrition. About one fifth of the children below 6 years of age were in Grade II. These children need special attention towards regular growth monitoring and supplementary feeding to enable them to move to Grade I rather than to Grade III.

Levels of malnutrition were on lower side across the different age groups but were slightly higher in the centres with untrained AWWs. Centres with trained AWWs had significantly higher proportion of infants in normal grade while the centres with untrained AWWs had significantly higher proportion of Grade IV infants.

The kind of inputs given by the trained AWW as a result of the training she received may be responsible for the difference observed between the trained and untrained AWWs on the above aspects.

Better nutrition practices, reduction in incidence of malnutrition among children and improvement in nutrition status of the children due to the care provided by the AWW were cited as the changes that have taken place in the villages due to ICDS programme by community leaders and Zilla / Taluk Panchayat leaders.

We can conclude that ICDS has helped in reducing malnutrition and improving the nutrition status of the children. And ICDS has played a vital role in bringing the transition from higher levels of malnutrition to lower levels of malnutrition

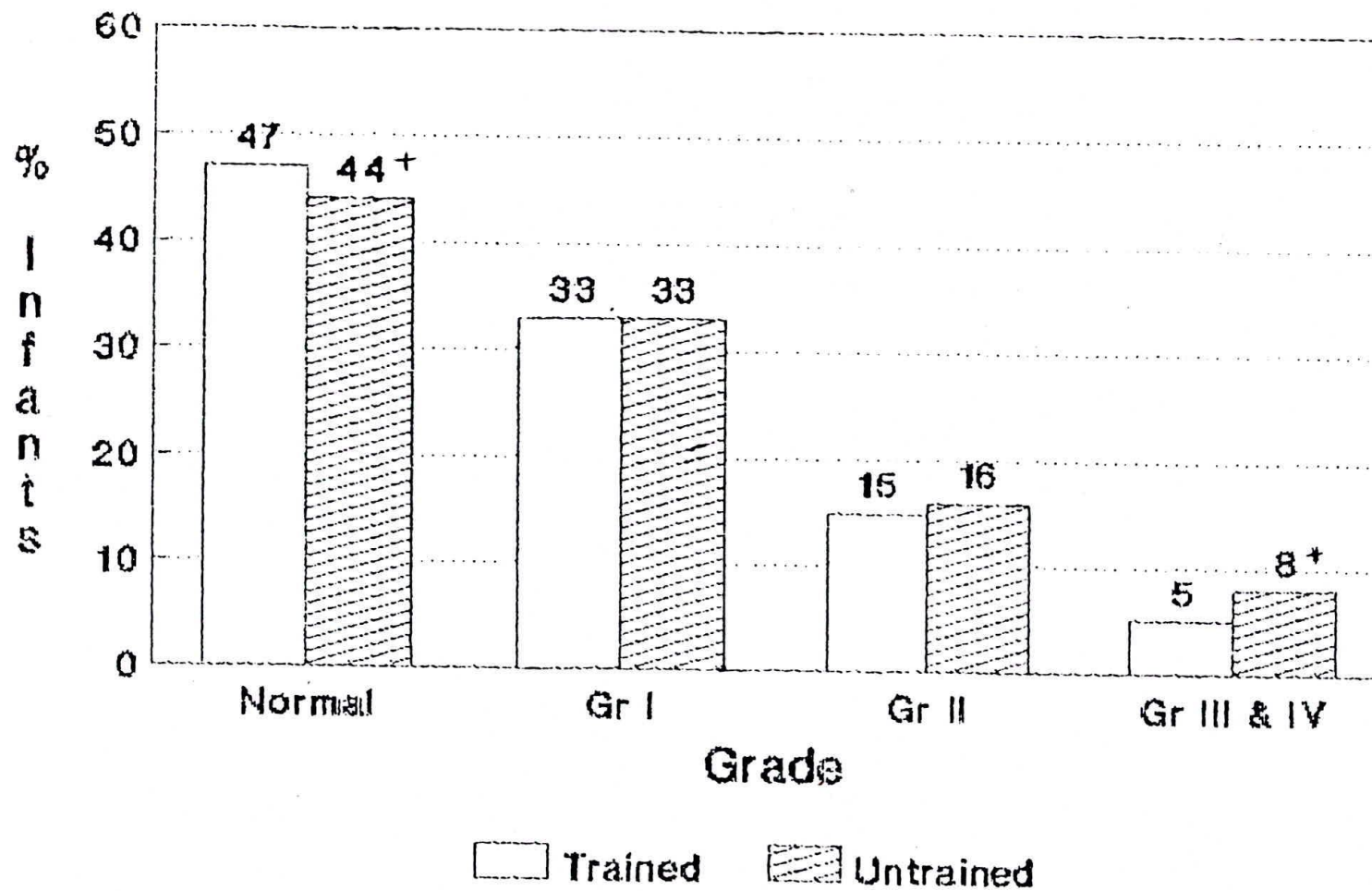


Table 5.3a Distribution of children by Age and Nutrition Grade  
(As per records)

	(% children)	
	Trained	Untrained
<u>Age / Nutrition Grade</u>		
<u>&lt; 1 year</u>		
Normal	47	44 ( $z = 7.77$ )*
Grade I	33	33
Grade II	15	16
Grade III	0	1
Grade IV	5	7 ( $z = 10.80$ )*
Total No. of children < 1 year	9667	6900
<u>1-3 years</u>		
Normal	33	33
Grade I	41	39
Grade II	21	19
Grade III	1	1
Grade IV	4	7
Total No. of children 1-3 years	33877	24580
<u>3-6 years</u>		
Normal	35	37
Grade I	41	36
Grade II	20	19
Grade III	1	1
Grade IV	4	6
Total No. of children 3-6 years	44311	32276
<u>All</u>		
Normal	36	37
Grade I	40	37
Grade II	20	19
Grade III	1	1}
Grade IV	4	7} ( $z = 48.22$ )*
Total No. of children 0-6 years	87855	63756

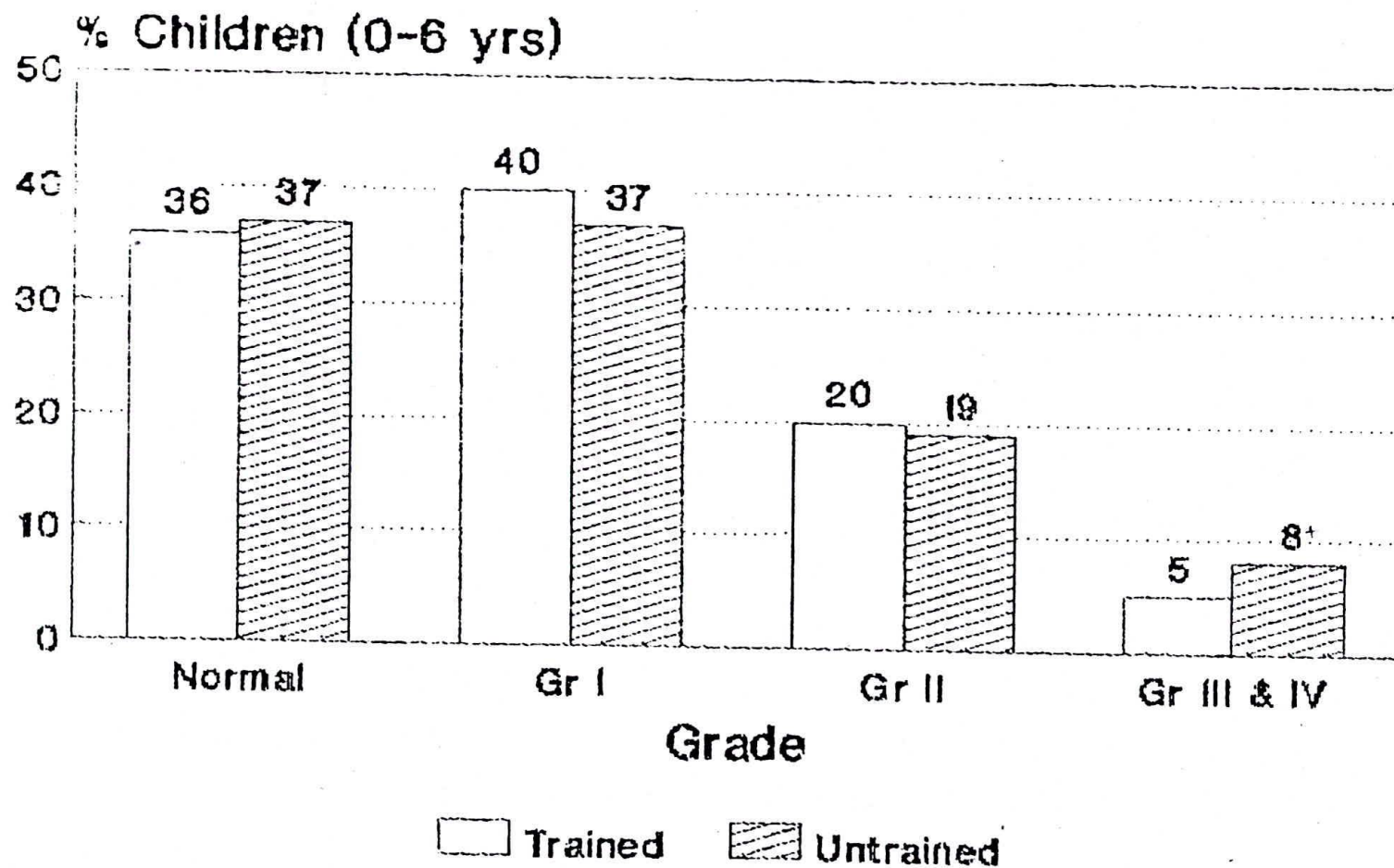
\* Significant at 5% level of significance

Fig.5.3 Nutriton Status of Infants



<sup>+</sup> Significant at 5% level of significance

Fig.5.4 Nutriton Status of  
Children (0-6 years)



+ Significant at 5% level of significance



## 5.4 GROWTH MONITORING

Monthly weighing of all the children below 6 years of age and plotting of weights on the growth chart are important activities performed by the AWWs. This provides the base for assessing the nutrition status of the children and identifying the malnourished children.

All the AWWs interviewed in the study were asked about the different aspects relating to growth monitoring like ability to do, date of last weighing, and proportion of children weighed. Analysis of this data is presented in Table 5.4a. About three fourth of the AWWs who reported periodic weighing of the children as an activity carried out by them, reported that they were able to weigh the children regularly. Rest of the AWWs - 22% trained and 27% untrained - were not able to weigh the children regularly mainly due to lack of cooperation from the parents/mothers (mentioned by 96 AWWs) and non availability of the weighing scales (mentioned by 87 AWWs). Some of the AWWs reported that they borrow the weighing scales from the near by AWC everytime they carry out weighing. Hence there is an urgent need to supply weighing scales to these AWCs.

Plotting of the weights is not a problem area because almost all the AWWs who reported it as an activity to be carried out by them were able to do it.

More than half of the AWWs reported to have weighed the children less than one month before the survey. Last weighing took place more than 3 months before the survey in 15 to 21 per cent of the AWCs. Proportion of AWWs carrying out weighing of children regularly was significantly higher among the trained AWWs, compared to the untrained AWWs. Regular weighing of children was more commonly observed among the trained AWWs and it appears to be a problem in case of the untrained AWWs. Perhaps better convincing capability, interaction skill and enhanced interest could be the plausible reasons for better performance of trained AWWs regarding the service of weighing of children.

In an identical proportion of 64 per cent of the AWCs, more than 90 per cent of the children were weighed (last time). Less than half of the children were weighed in 3 to 6 per cent of the AWCs. The emerging issue is that there is a need to sensitise the mothers regarding regular weighing of the children and its importance.

Further classification of the frequency of weighing data by age of the child revealed that the problem of irregular weighing was more common among the children below 3 years of age. Weighing of the pre school children (3-6 years) was done more regularly by the AWWs as they were readily available at the AW centre.

The problem is that the mother will be busy with her own work and she may not find time to come to the AWC to get the child weighed. This problem needs to be resolved. If the AWW stays in the AWC village, she can perhaps carry out the weighing at any time which suits the mothers. The problem becomes more acute if the AWW stays in a near by village and can not have flexible timings for weighing of the children to suit the mothers schedule.

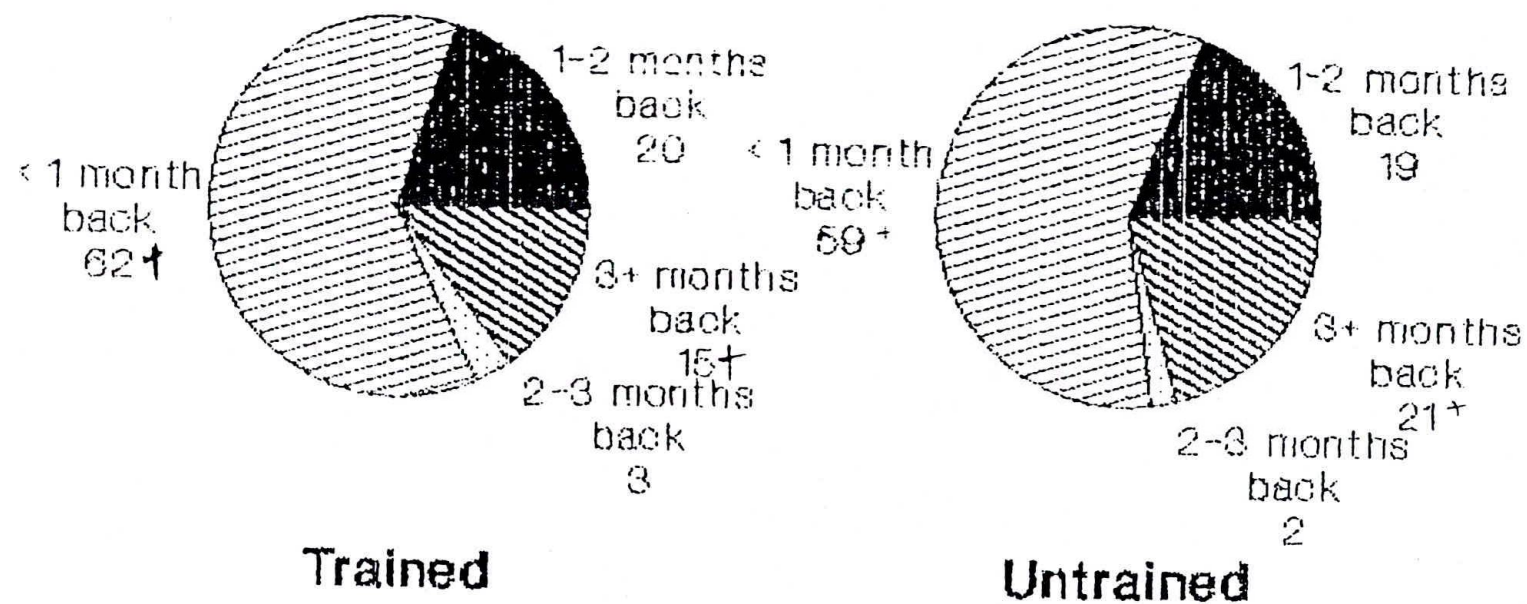
Table 5.4a Growth Monitoring

	(% AWWs)	
	Trained	Untrained
Able to Weigh the children	78	73 ( $z = 2.57$ )*
Total No. of AWWs reporting weighing as an activity	644	553
Able to plot the weights	98	97
Total No. of AWWs reporting plotting of weights as an activity	231	258
<u>When last weighed children</u>		
< 1 month	62	58 ( $z = 3.97$ )*
1 - 2 months	20	19
2 - 3 months	3	2
3+ months	15	21 ( $z = 7.65$ )*
<u>Proportion of children weighed (last time)</u>		
26 - 50%	3	6
50 - 74%	11	12
75 - 89%	21	19
90 - 99%	27	22 ( $z = 5.61$ )*
100%	37	42
Total No. of AWWs (registers made available)	1349	1007

\* Significant at 5% level of significance



**Fig.5.5 Last Weighing of  
Children (0-6 years)**



\* Significant at 5% level of significance

**To sum up**

The immunisation programme seems to be effective across the AW centres because of the higher levels of coverage. Significant differences were noticed between the trained and untrained AWWs in terms of coverage for immunisation (say Measles, Vitamin A, Pulse Polio).

AWWs who received innovative refresher training could perform better in providing referral services to the needy children and mothers.

Nutrition status of the children was found to be satisfactory across the centres visited due to the fact that only 5 to 8 per cent of the children below 6 years of age were malnourished. Incidence of malnutrition was found to be less in centres with trained AWWs.

The trained AWWs were able to deliver the service of growth monitoring and promotion more efficiently. They were able to communicate to the mother about the kind of care to be taken in case the child is malnourished.

Aforesaid factors perhaps led to improvement in the health and nutrition status of the children below 6 years of age.

On being asked about the post ICDS changes that have taken place in the village, the AWWs mentioned about the following changes :

- enhanced trust in immunisation
- improvement in health and nutrition status of the children

Mothers interviewed in the study highlighted the achievements of the ICDS which are listed below :

- immunisation for all the children
- improvement in health status of the children
- reduction in malnourishment among the children

**CHAPTER 6**  
**PRE SCHOOL EDUCATION**



In this chapter, performance of the AWWs - trained Vs untrained - in terms of Pre school education sessions is discussed on the basis of scanning of records and response from AWWs as well as mothers. Pre school or early childhood education is another important service provided by the AWW for children of 3-6 years of age. Purpose of this service is social, mental and psychological development of the child. This service is more often noticed to have a positive impact on the child's schooling status also.

## **6.1 ACTUAL PERFORMANCE (SCANNING OF RECORDS)**

The AWWs are supposed to organise the pre school sessions for about 25 to 26 days in a month for all the children of 3-6 years of age. To get a feel of the real situation, information relating to number of days pre school session was held during the 1 month period before the survey, proportion of children attended and the day when the last session was held were collected during the study by scanning the relevant records. The analysis presented in Table 6.1a reveals that about four out of five AWWs conducted the pre school sessions for 25 or 26 days during the one month preceding the survey. Proportion of AWWs who conducted pre school sessions for 25+ days was slightly but significantly higher among the trained AWWs (83% Vs 81%,  $z=8.41$ )

Proportion of AWWs who did not organise pre school session during 1 to 6 days before the date of the survey varied from 13 among the trained AWWs to 19 among the untrained AWWs. Here again, the difference was found to be statistically significant at 5% level of significance.

The trained AWWs were more interested to perform their duties as AWW and they were also better equipped to make the pre school sessions interesting because of the enhanced communication ability and better understanding about the effective use of the pre school aids.

As regards the pre school attendance, about half of the AW centres recorded more than 90% attendance during the 1 week preceding the survey. The problem seems to be more acute in 14 per cent of the AWCs where the attendance varied from 50 to 74 per cent. Discussion on the factors responsible for low pre school attendance is given in the next section.

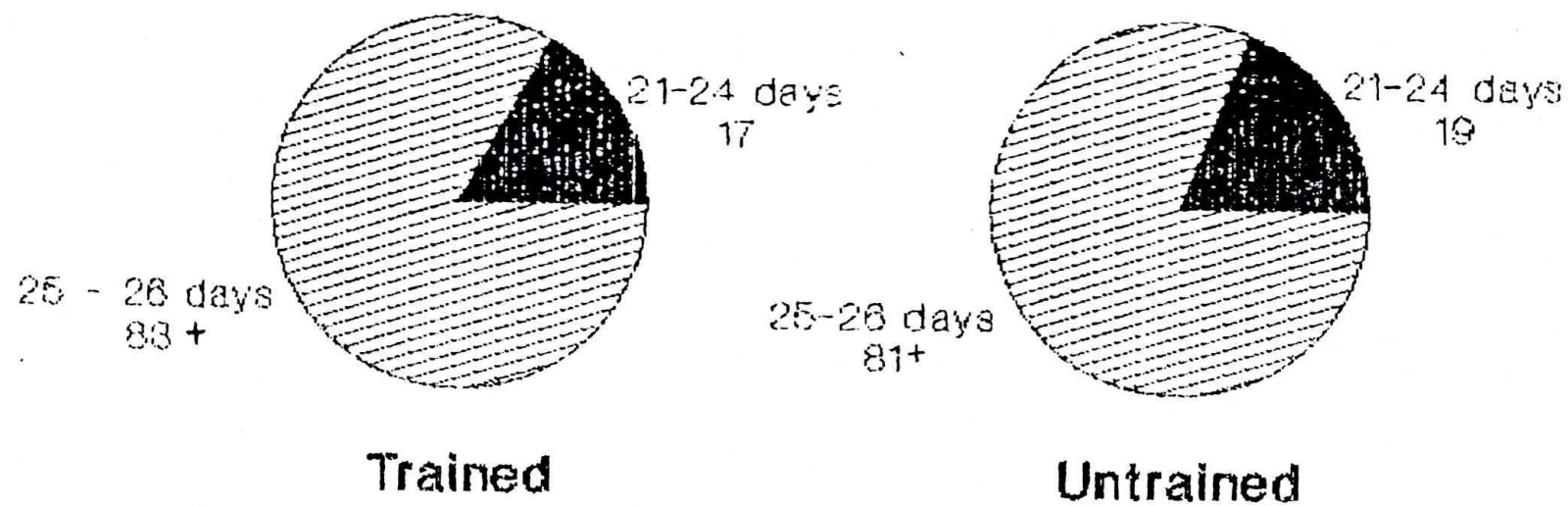
Table 6.1a No. of days Pre school held and attendance

(% AWWs)

	Trained	Untrained
<u>No. of days held (last month)</u>		
10-20 days	-	1
21-24 days	17	18
25-26 days	83	81 ( $z = 8.41$ )*
<u>When last held</u>		
1 - 3 days before	82	76 ( $z = 23.89$ )*
4 - 6 days before	5	5
7 - 10 days before	1	5}
11 - 14 days before	2	2} ( $z = 26.61$ )*
15+ days before	10	12}
Total No. of AWWs	1449	1148
<u>Proportion attended (Last week's average)</u>		
25 - 29 %	1	1
50 - 74%	14	14
75 - 89%	37	35
90 - 99%	28	30
100%	20	20

\* Significant at 5% level of significance

**Fig.6.1 No. of Days Pre School Held**



**+Significant at 5% level of significance**



## 6.2 PRESCHOOL SESSIONS - AWW's STATED RESPONSE

Attempts were made in the study to elicit information on preschool sessions like different activities carried out, time spent, and use of aids, from the AWWs. Results relating to these issues are presented in Table 6.2a.

About three fourth of the AWWs (71% untrained and 75% trained) reported that they were able to conduct the pre school sessions properly and regularly. Rest of the AWWs (25 to 29 per cent) were not able to organise the pre school sessions regularly and properly mainly due to lack of cooperation from the mothers in sending the child to AWC. Another problem faced by the AWWs was that the children of 5 years were attending the primary school so as to get the rice given under the mid day meals scheme.

Senior officials interviewed in the study also opined that the attendance at the pre school was a problem mainly because of the following reasons :

- children join the primary school at the age of 5 years so as to receive the rice given under the mid day meals scheme.
- parents prefer to send the children to private nurseries.
- Language problem in border districts like Kolar, Bellary (Telugu, mother tongue vs. Kannada, the language of instruction)

Proportion of AWWs reporting their inability to conduct the pre school sessions properly was slightly but significantly less among the untrained AWWs, compared to the trained AWWs (29% Vs 25%).

Special attention and efforts are needed to ensure that all the AWWs conduct pre school sessions regularly and properly. In this connection, the problems mentioned above need to be resolved by the senior functionaries.

Almost all the AWWs reported that they carry out activities like teaching games, songs and telling stories during the pre school session. Teaching alphabets and numbers were mentioned by about half of the AWWs.

On an average, AWWs reported that they spend 165 to 167 minutes (about 2 hrs 45 mts) on pre school sessions everyday. Of this, maximum time is usually devoted for games (48 mts) followed by songs (33 mts), stories (32 mts), alphabets (26 mts) and numbers (24 mts).

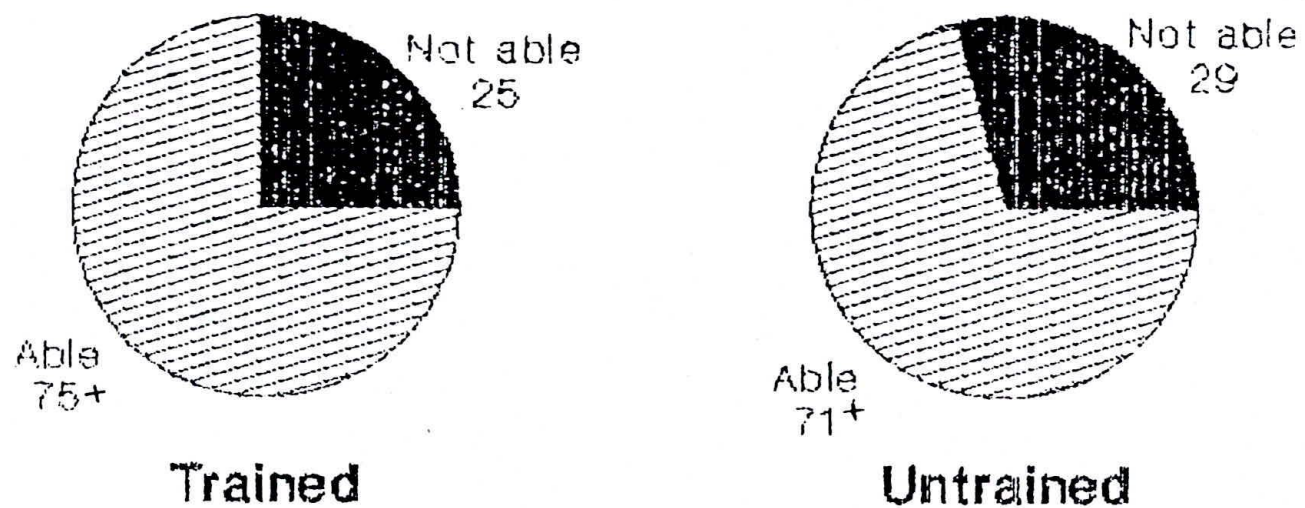
Table 6.2a Preschool Sessions - (AWW's Response)

	(% AWWs)	
	Trained	Untrained
Able to organise pre school sessions	75	71 (z=14.05)*
Total No. of AWWs reporting pre school as an activity	1452	1157
<u>Activities carried out<sup>(1)</sup></u>		
Teaching games	99	99
Teaching songs	98	98
Teaching alphabets	54	53
Teaching numbers	46	46
Telling stories	97	95
Total No. of AWWs	1485	1180
<u>Average time spent on (in Mts)</u>		
Games	48.1	48.7
Total No. of AWWs teaching games	1471	1170
Songs	33.1	33.6
Total No. of AWWs teaching songs	1449	1158
Alphabets	26.8	26.5
Total No. of AWWs teaching alphabets	803	624
Numbers	24.7	24.5
Total No. of AWWs teaching numbers	689	540
Stories	2.6	3.4
Total No. of AWWs telling stories	1434	1124
Total time spent (Mean)	165 (mts)	167 (mts)

☐ Total exceeds 100 due to multiple response

\* Significant at 5% level of significance

Fig.6.2 Ability To Organise Pre School



<sup>+</sup> Significant at 5% level of significance



### 6.3 PRESCHOOL ATTENDANCE OF CHILD (MOTHER'S RESPONSE)

All the mothers were asked about awareness of the pre school sessions, attendance of the child, number of days the sessions are held and duration of the session. Analysis of this data is presented in Table 6.3a.

More than four fifth (88 to 89 per cent) of the mothers (with a child below 6 years) mentioned pre school sessions as a service provided by the AWW indicating higher levels of spontaneous awareness about the pre school. As a matter of fact, pre school emerged as the top most service provided under the ICDS (by AWW) in the minds of the mothers. Levels of aided awareness about pre school among the mothers of 3-6 yrs child were also noticed to be very high. So, awareness of pre school was almost universal and hence awareness is not a problem area.

Almost all (94-95%) the mothers reported that the child ever attended the pre school at the AWC. And 92 per cent of the mothers reported that the child was (currently) attending the pre school sessions at the AW centre.

As regards the number of days pre school sessions were held, about one fifth of the mothers reported it to be 25 days (in a month). About two third of the mothers reported that the sessions were held for 21-24 days in a month.

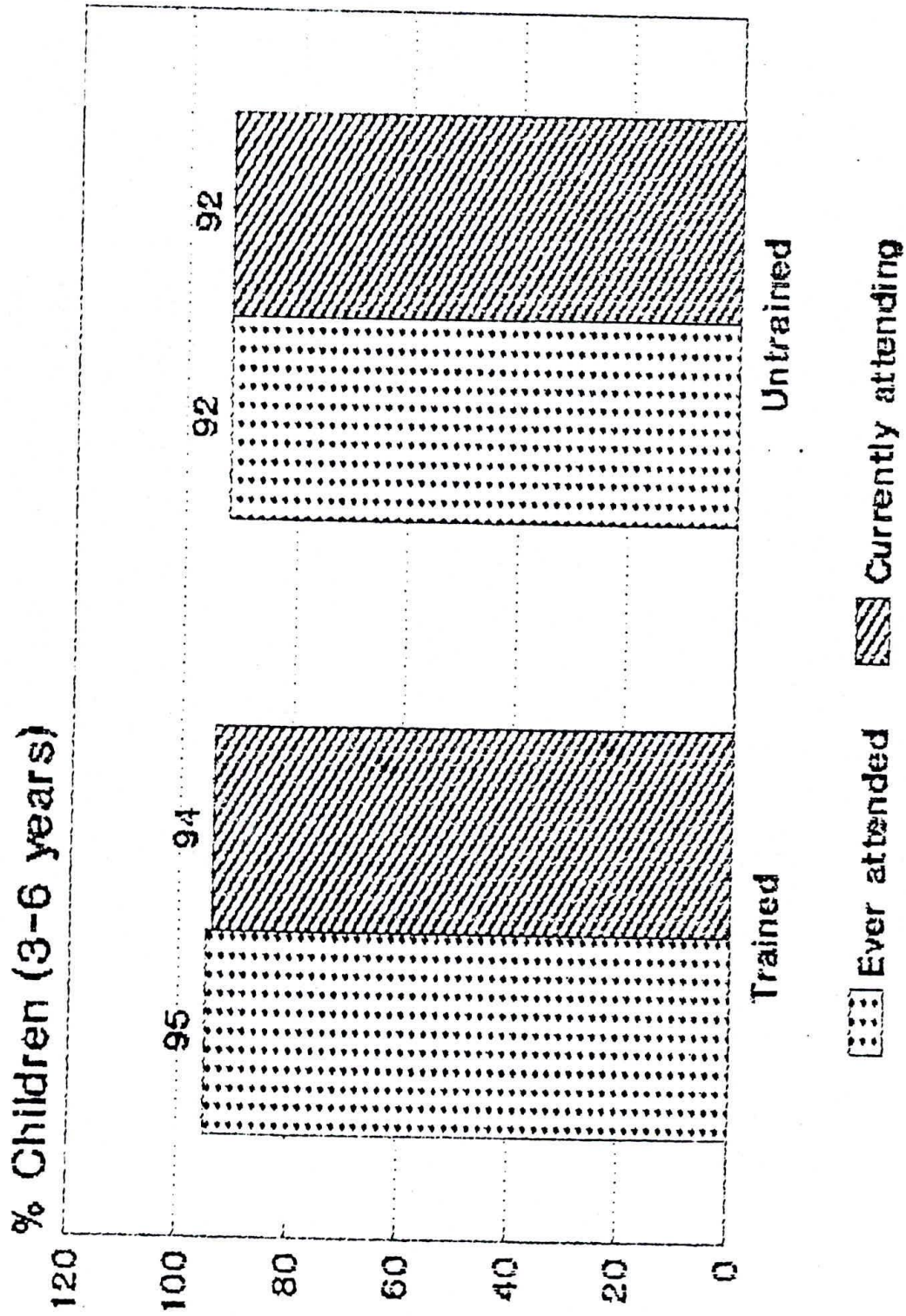
According to the mothers, the sessions on an average, were held for 3 hrs 45 min.

Table 6.3a Pre school Awareness & Attendance (Mother's Response)

(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
<u>Awareness</u>		
Spontaneous	89	88
Total No. of Mothers with < 6 yrs child	940	668
Aided	92	91
Total No. of Mothers with 3-6 yrs child	441	281
<u>Attendance</u>		
Child ever attended	95	94
Child currently attending	92	92
Total No. of Mothers with 3-6 yrs child	405	255
<u>No. of days sessions held (in a month)</u>		
Upto 15	5	3
16 - 20	6	8
21 - 24	66	67
25	19	20
Can't say	3	3
<u>Duration of session</u>		
Upto 2 hrs	6	4
2.1 - 3 hrs	38	27
3.1 - 4 hrs	44	52
4.1 - 5 hrs	11	15
Mean (hrs)	3.42	3.46
Total No. of Mothers reporting preschool attendance of child	385	240

Fig. 6.3 Pre School Attendance





### Results from Participant Observation

Findings relating to the preschool sessions from the participant observation of 5 AWCs (3 with trained AWWs and 2 with untrained AWWs) are as follows :

- \* Pre school sessions were held for all the 7 days in 4 out of the 5 AWCs observed.
- \* In one centre (with untrained AWW), pre school was held for 5 out of the 7 days period of observation.
- \* Average attendance in the centres with trained AWWs varied from 51 per cent to 98 per cent.
- \* In case of centres with untrained AWWs, average attendance varied from 28 per cent to 84 per cent.
- \* The trained AWWs conducted pre school sessions for about 50 to 120 minutes (on an average).
- \* The untrained AWWs conducted pre school sessions for about 45 to 90 minutes (on an average).
- \* The trained AWWs used pre school aids for 4 days, 6 days and 7 days.
- \* The untrained AWWs used pre school aids for 1 day and 3 days.
- \* Flip books, charts/posters on animals were the aids used by the AWWs.
- \* The trained AWWs were noticed to be making aids locally (eg. picture card of animal).
- \* Use of integrated approach was noticed in all the centres (animals being the topic for the week).

Above observations corroborate the findings presented in the earlier sections.

#### 6.4 USE OF INTEGRATED APPROACH

All the AWWs are expected to conduct the pre school sessions using the integrated approach under which 44 issues or subjects at the rate of one subject per one week will be taken up by the AWWs. For instance, the issues taken up in the month of October included Mahatma Gandhi (1st week) Birds (2nd week), Hospital (3rd week) and Flowers (4th week). Besides the list of subjects to be covered, detailed time table for every week was provided to the AWWs. The integrated approach is aimed at improvement of views, development of absorbing power, improvement of language and imagination, and social development.

On being asked whether they use the integrated approach, 90 per cent of the trained AWWs and 80 per cent of the untrained AWWs replied in affirmative. The difference between the trained and untrained AWWs in terms of use of integrated approach was found to be statistically significant at 5% level of significance.

The refresher training imparted to the AWWs, had a positive influence on the extent of interest showed by the AWWs in various activities carried out by them. And use of integrated approach was one among such activities receiving greater attention from the trained AWWs.

On being further probed about the uses / advantages of the integrated approach, the AWWs mentioned about the advantages listed below :

- Psychological development of the child
- Better understanding as the same subject is taken up for 1 week
- Better concentration of the child
- Child learns how to live because of the issues taken up
- Better understanding as aids are used.



## 6.5 SCHOOLING STATUS OF CHILDREN

Attempts were made in the present study to assess the impact of pre school education on the child's attendance in the primary school. To this end, all the mothers were asked about the schooling status of the children of 6-14 yrs in the house. The analysis of this data presented in Table 6.5a, indicates the positive influence of pre school on primary school attendance as only 8 to 9 per cent of the households had children out of school. In 76 to 81 per cent of the households, all the children of 6-14 yrs were in school at the time of the survey.

The impact seems to be more visible in the villages with trained AWWs compared to the villages with untrained AWWs, with the difference being statistically significant at 5% level of significance. This can be attributed to better performance of the trained AWWs regarding the pre school activity.

On being asked about the impact of the ICDS programme, AWWs mentioned about the following changes relating to primary education in the village :

- child more interested to go to primary school (14 to 18%)
- increase in primary school attendance (17 to 20%)
- increase in primary school admissions (5 to 7%)

Table 6.5a Schooling status of children of 6-14 years

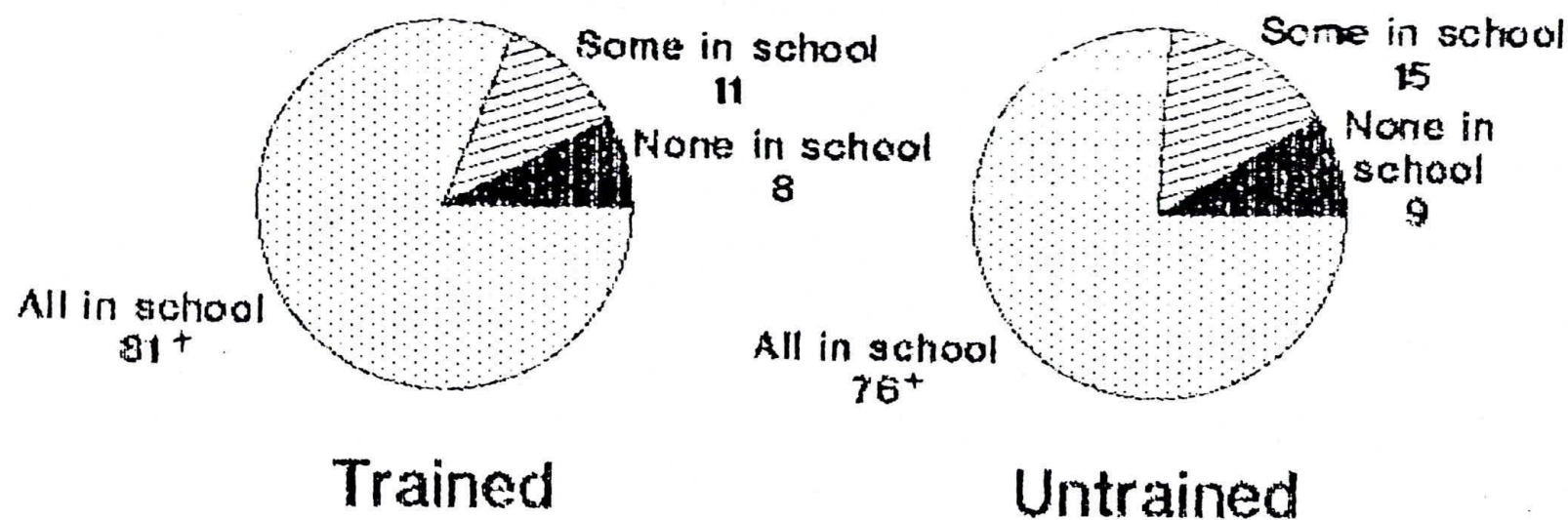
(% Mothers)

Status	Centres with	
	Trained AWW	Untrained AWW
All in school	81	76 (z = 3.42)*
Some in school	11	15
None in school	8	9
Total No. of mothers with 6-14 yrs children	435	351

\* Significant at 5% level of significance



**Fig.6.4 Schooling Status of Children  
of 6-14 years in the Household**



<sup>+</sup> Significant at 5% level of significance

### To Sum up

About one fourth of the AWWs reported to be having problems in organising the pre school sessions regularly due to various reasons. However, the AWWs who received the innovative refresher training were able to organise the pre school sessions every day.

The Pre school sessions were reported to be usually held for about 2 hours 45 minutes every day with games, songs and telling stories being the major pre school activities.

Participant observation of the AWCs revealed better performance of the trained AWWs in terms of regularity, attendance, time spent and use of pre school aids.

The refresher training imparted to the AWWs had a positive influence on the use of integrated approach for conducting pre school sessions.

Schooling status of the children of 6-14 years was noticed to be better in the villages with trained AWWs with all the children of 6-14 yrs in the household currently in school in majority (81%) of the households.

**CHAPTER 7****WOMEN'S KNOWLEDGE & AWARENESS OF HEALTH & CHILD CARE  
PRACTICES**



Knowledge and awareness of various health and child care practices will be crucial to improve the health and nutrition status of the child. Having observed better health and nutrition status of children from the centres with trained AWWs, we make an attempt in this chapter to understand the situation regarding knowledge and awareness of mothers about the relevant aspects.

## 7.1 IMMUNISATION

### Child Immunisation

Attempts were made in the present study to find out the extent of awareness as well as utilisation of the immunisation services provided to the child among the mothers. Analysis of this data is presented in Table 7.1a.

Spontaneous awareness of the immunisation services provided to the child was low among the mothers of 0-6 years children though it was slightly better among the mothers from the centres with trained AWWs. The difference between the mothers from the centres with trained and untrained AWW was found to be statistically significant at 5% level of significance.

Aided awareness about the specific injections / doses of immunisation given to the child was very high across the centres irrespective of the training status of the AWW. More than 90 per cent of the centres were aware of BCG, OPV and DPT. Awareness of the Vitamin A drops was low among the mothers with a child of 1-2 years from centres with untrained AWWs. Level of awareness about Vitamin A drops was significantly higher (at 5% level of significance) among the mothers from the centres with trained AWWs. Perhaps the trained AWWs might have created greater awareness among the mothers about child immunisation making use of the improved communication ability in the post refresher training period.

Improvement in awareness about the child immunisation among the mothers was reported by the community leaders as an important post ICDS change in the village.

But gaps in the awareness about Measles and Vitamin A were visible. Hence IEC programmes should focus upon increasing awareness of Measles and Vitamin A drops.

Table 7.1a Awareness about Child Immunisation among Mothers

(% Mothers)

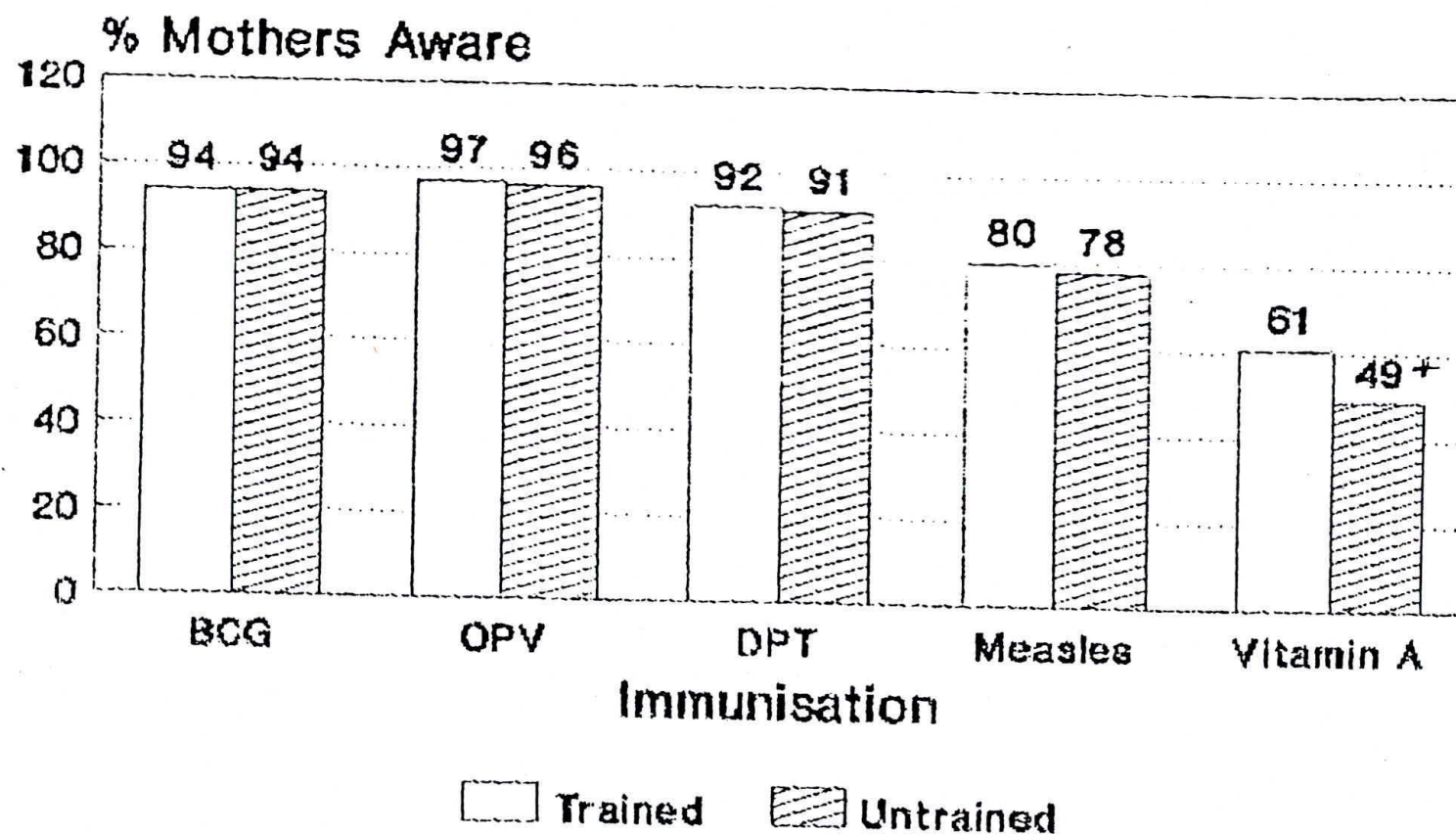
	Centres with	
	Trained AWW	Untrained AWW
<u>Spontaneous Awareness of</u> Immunisation of children	36	30 ( $z = 5.08$ )*
Total No. of mothers with 0-6 yrs child	940	668
<u>Aided awareness of</u> <input type="checkbox"/>		
BCG	94	94
OPV	97	96
DPT	92	91
Measles	80	78 ( $z = 1.06$ )**
Vitamin A Drops	61	49 ( $z = 5.22$ )*
Total No. of mothers with 1-2 yrs child	271	198

☐ Total exceeds 100 due to multiple response

\* Statistically significant at 5% level of significance

\*\* Statistically not significant at 5% level of significance

Fig.7.1 Awareness about Child Immunisation



<sup>+</sup> Significant at 5% level of significance



### Immunisation Provided to Pregnant Women

All the women with a child of 0-6 years child and mothers with a child of 0-2 years were asked a few questions about the immunisation provided to the pregnant women. Analysis of this data is presented in Table 7.1b.

Spontaneous awareness of TT injection was low among the mothers of 0-6 years child. But the extent of awareness was significantly higher among the mothers from centres with trained AWWs (29% Vs 21%).

However, more than four fifth (88%) of the mothers with a child of 0-2 years reported awareness of TT injection (upon aiding).

Table 7.1b Awareness about TT among Mothers

	Centres with	
	Trained AWW	Untrained AWW
<u>Spontaneous awareness of</u> TT Injection	29	21 ( $\chi^2 = 7.31$ )*
Total No. of mothers with 0-6 years child	940	668
<u>Aided awareness of</u> TT Injection	88	88
Total No. of mothers with 0-2 years child	497	385

## 7.2 HEALTH CHECKUPS

All the mothers interviewed in the study were asked about the service of health checkups provided by the AWW and health functionaries like ANM, LHV and MO. Analysis of this data is given in Table 7.2a.

More than one third of the mothers from the centres with trained AWWs (36%) were aware of the general health checkups carried out at the AWC. The corresponding figure for the centres with untrained AWWs was 23 per cent. The difference between the centres with trained and untrained AWWs was found to be statistically significant at 5% level of significance.

Spontaneous awareness about the health checkups carried out for the pregnant women was very low among the mothers. However, upon aiding, the awareness levels have gone up substantially. About three fourth of the mothers were aware of the health checkups carried out for the pregnant women.

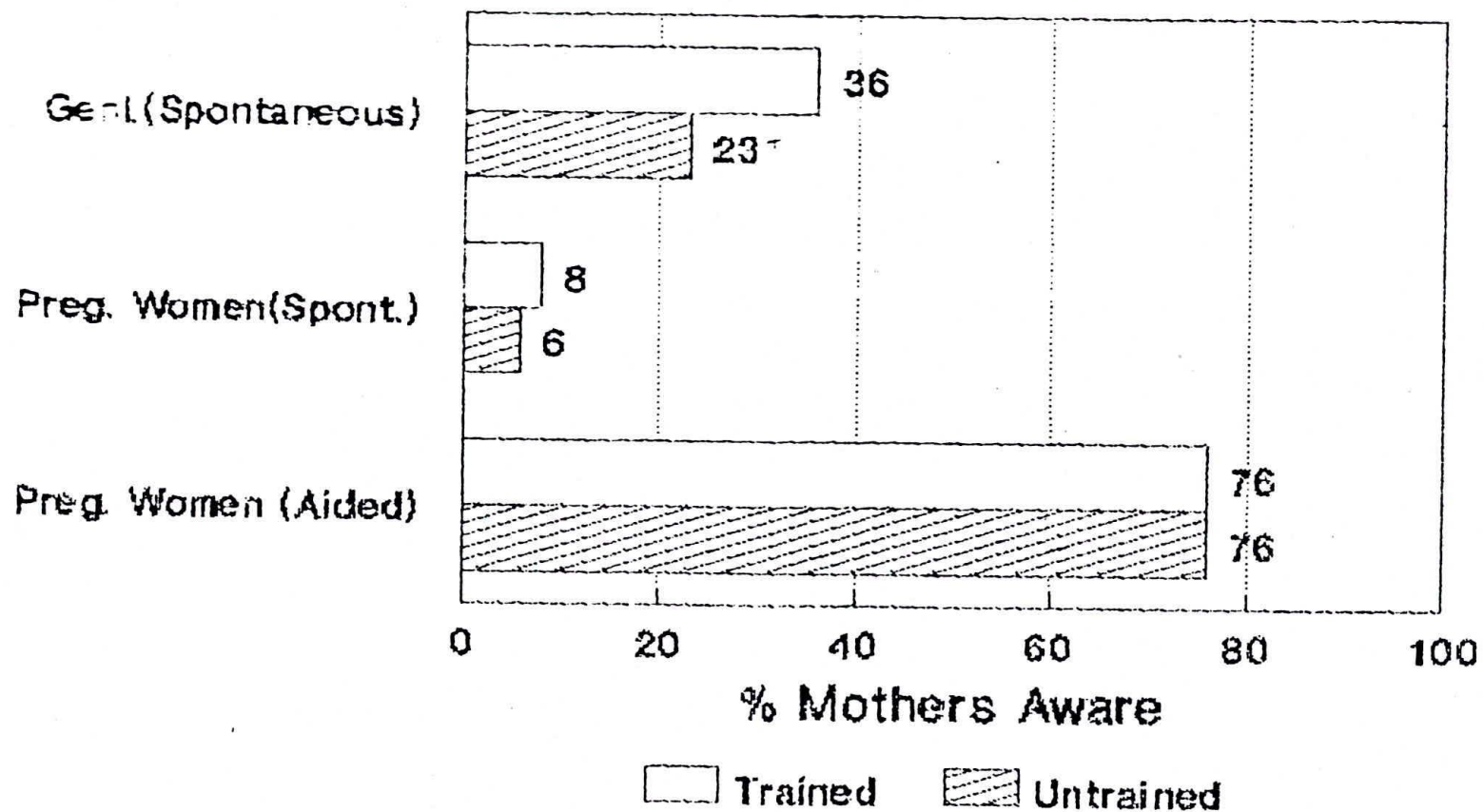
Table 7.2a Awareness of Health Checkups

(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
<u>Health Checkup (General)</u>		
Spontaneous awareness	36	23 ( $z = 11.27$ ) *
Total No. of Mothers with 0-6 yrs child	940	668
<u>Health Checkup (Preg. Women)</u>		
Spontaneous awareness	8	6
Total No. of Mothers with 0-6 yrs child	940	668
Aided awareness	76	76
Total No. of Mothers with 0-2 yrs child	497	385

\* Significant at 5% level of significance

Fig.7.2 Awareness about Health Checkups



Significant at 5% level of significance



### **7.3 REFERRAL SERVICES**

On being asked about the various services provided by the AWW, 12 to 13 percent of the mothers with a child of 0-6 years mentioned about the referral services. This indicates low levels of (spontaneous or unaided) awareness about the referral services.

### **7.4 TREATMENT OF MINOR AILMENTS**

In response to the question on various services provided by the AWW under the ICDS, 13 to 14 per cent of the mothers with a child of 0-6 years mentioned about the service of treatment of minor ailments. That is, spontaneous awareness about the treatment of minor ailments was low among the mothers irrespective of the training status of the AWW.

## 7.5 SUPPLEMENTARY FEEDING

Proper utilisation of any service depends to a greater extent on the awareness of such service among the beneficiaries. All the mothers with a child of 0-6 years, 0-2 years and 1-6 years were asked a few questions to find out the extent of awareness of the service of supplementary feeding. Analysis of this data presented in Table 7.5a reveals higher levels of awareness about the supplementary feeding service among the mothers. But the problem is that not all the mothers with a child of 0-2 yrs have heard about the supplementary food given to the pregnant women (even after aiding by the interviewer). This brings out the necessity to educate the mothers in general and the pregnant women in particular about the supplementary food given to them during the pregnancy. Supplementary food given to the children was almost universally known.

Table 7.5a Awareness about Supplementary Food

(% mothers)

	Centres with	
	Trained AWW	Untrained AWW
<u>Spontaneous Awareness</u>		
Supplementary food(preg women/children)	84	85
Total No. of mothers with <0-6 yrs child	940	668
<u>Aided Awareness</u>		
Supplementary food (pregnant women)	82	82
Total No. of mothers with 0-2 yrs child	497	385
Supplementary food (children)	99	99
Total No. of mothers with a child of 1-6 yrs	712	479

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## 7.6 GROWTH MONITORING

On being asked about the services provided by the AWWs, only 6 to 8 per cent of the mothers with a child of 0-6 years mentioned (spontaneously) about the periodic weighing of the children (Table 7.6a). After aiding, the levels of awareness have gone upto 81-84 per cent. The message is that still some of the mothers were not aware that the AWW weighs the children regularly at the anganwadi centre.

Proportion of mothers who were not aware of the periodic weighing was significantly higher among the mothers from the centres with untrained AWWs.

Table 7.6a Awareness about Periodic Weighing

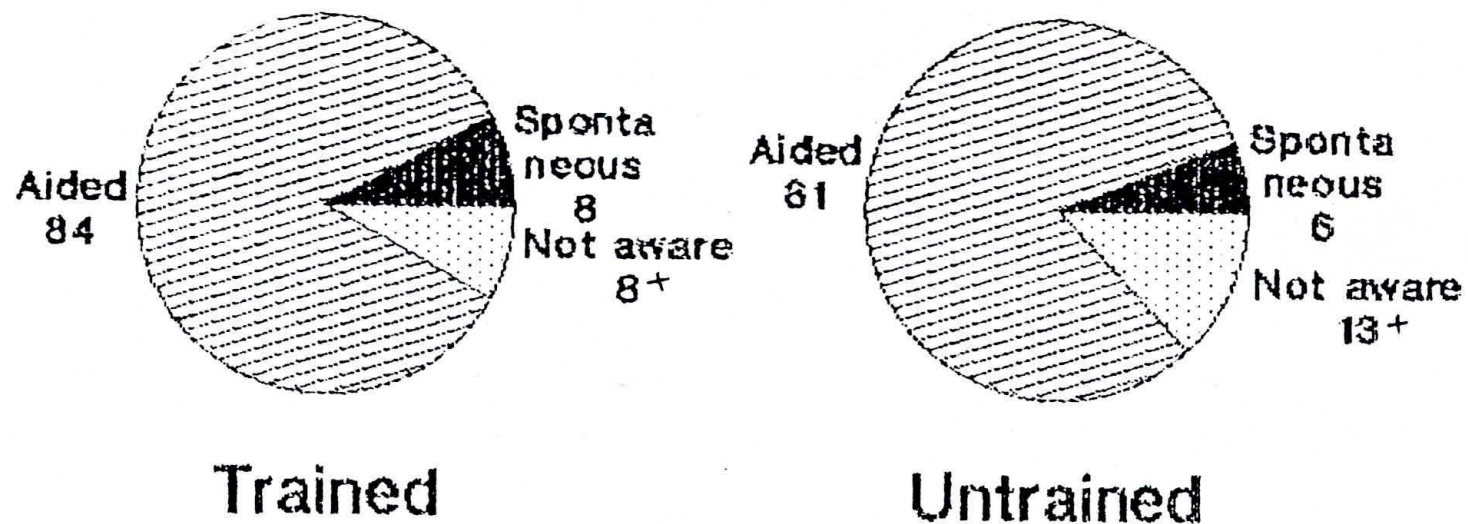
(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
<u>Awareness of weighing</u>		
Spontaneous	8	6
Aided	84	81
Not aware	8	13 (z = 6.68)*
Total No. of mothers with < 6 yrs child	940	668

\* Significant at 5% level of significance



**Fig.7.3 Awareness about  
Growth Monitoring**



+ Significant at 5% level of significance

**To sum up**

Levels of aided awareness of BCG, OPV and DPT were very high among the mothers irrespective of the training status of the AWWs. Extent of awareness about Vitamin A drops was significantly higher among the mothers from the centres with trained AWWs.

Extent of spontaneous awareness about TT given to the pregnant women was significantly higher in the centres with trained AWWs in spite of low levels of awareness across the centres irrespective of the training status of the AWWs. Aided awareness about TT for pregnant women was very high among the mothers irrespective of the training status of the AWWs.

Extent of awareness of the general health checkups was significantly higher among the mothers from the centres with trained AWWs. Even in these centres, only one third of the mothers were aware of it indicating low levels of awareness about the general health checkups among the mothers.

About three fourth of the mothers were aware of the health checkups carried out for pregnant women.

Awareness about referral services and treatment of minor ailments was low among the mothers.

Almost all the mothers (99%) were aware of the supplementary food given to the child while only 82 per cent were aware of the supplementary food given to the pregnant women

Most of the mothers (87% to 92%) were aware of the growth monitoring or periodic weighing of the children carried out by the AWW at the AWC. Extent of awareness of growth monitoring was significantly higher among the mothers from the centres with trained AWWs.

**CHAPTER 8****UTILISATION OF SERVICES BY MOTHERS AND CHILDREN**



Any improvement in the awareness and knowledge of any service would be useful and effective only when there is a change in the utilisation pattern of that service. In this chapter, results pertaining to utilisation of various services by the children as well as the mothers are discussed.

## **8.1 IMMUNISATION**

### Children

All the mothers with a child of 1-2 years were asked a series of questions relating to the child immunisation - whether the child received the immunisation and the number of doses received. Analysis of this data is presented in Table 8.1a.

Table 8.1a reveals almost universal utilisation of BCG, OPV and DPT in all the centres irrespective of the training status of the AWW. Proportion of children immunised against measles was less in the centres with untrained AWWs, compared to that in the centres with trained AWWs. Same holds good for Vitamin A drops also. Here again, the difference noticed between the centres with trained and untrained AWWs was found to be statistically significant (at 5% level of significance).

Due to higher levels of awareness as well as utilisation, immunisation programme seems to be effective across the AW centres with the effectiveness being more significant in the centres with AWWs who received the innovative refresher training. Better interaction ability and enhanced interest (mentioned by the functionaries as the benefits derived from the training) might have contributed to the improvement in performance of the trained AWWs with regard to utilisation of the child immunisation services.

Most of the mothers (95%) with a child of 0-5 years interviewed in the study reported that all their children of 0-5 years received the pulse polio drops on December 7, 1997 (Table 8.1a). This perhaps indicates the success of the pulse polio programme in the study area.

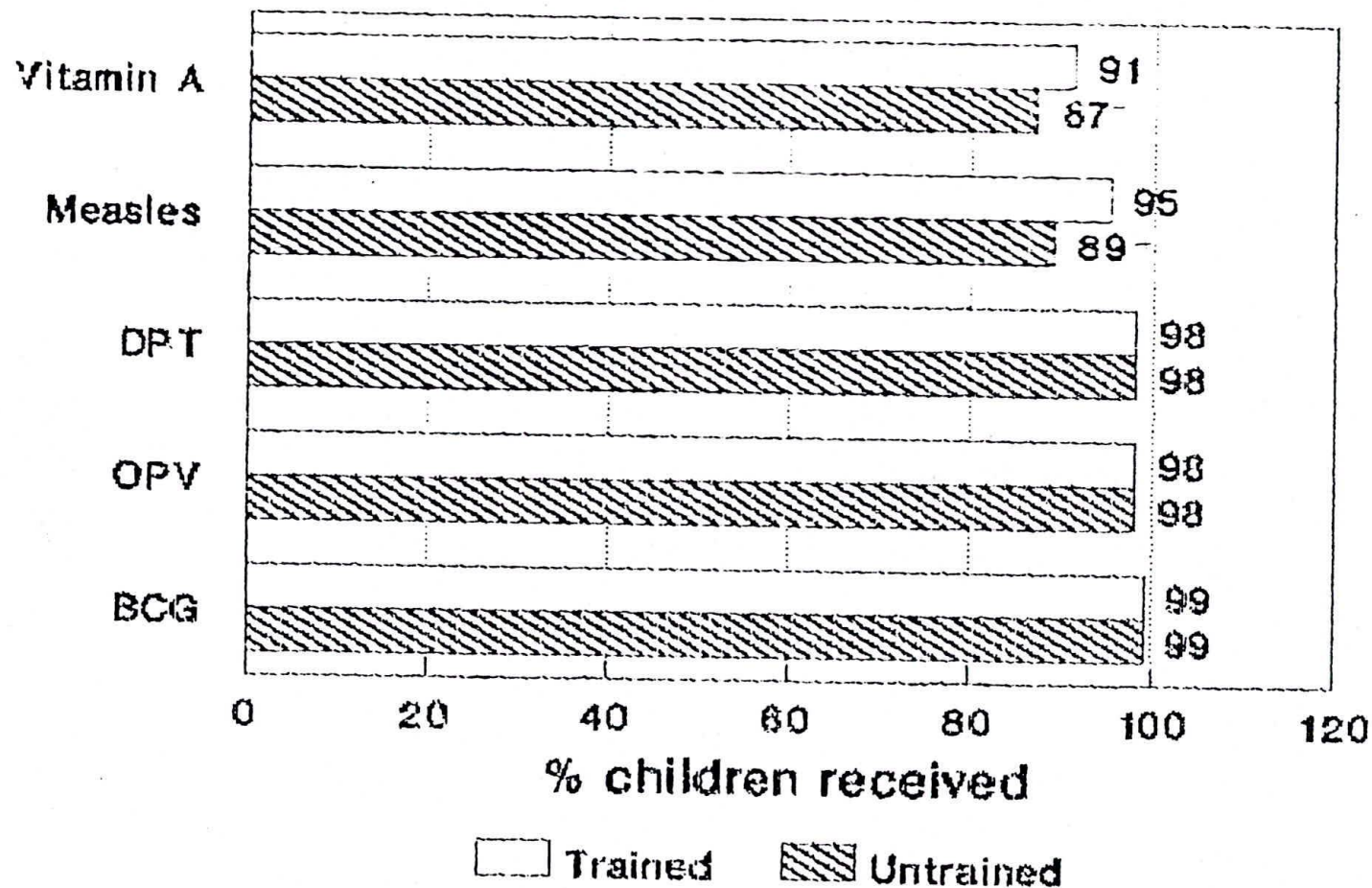
Table 8.1a Immunisation received by child

	Centres with	
	Trained AWW	Untrained AWW
<u>% of children received</u>		
BCG	99	99
Total No. of mothers aware of BCG	256	186
OPV	98	98
Total No. of mothers aware of OPV	264	191
DPT	98	98
Total No. of mothers aware of DPT	250	181
Measles	95	89 (z = 4.79)*
Total No. of mothers aware of Measles	218	155
Vitamin A	91	87 (z = 2.77)*
Total No. of mothers aware of Vitamin A	164	97
<u>Pulse Polio (DEC '97)</u>		
Half	0	1
Three fourth	1	1
All	95	95
No response	4	3
Total No. of mothers with 0-5 years child	941	668

\* Statistically significant at 5% level of significance

Fig 8.1 Immunisation Received by Child

Immunisation



Significant at 5% level of significance



Analysis of the data on number of doses received by the child presented in Table 8.1b reveals that BCG and Measles - given only once - were received by almost all the children properly. In case of OPV and DPT, about 10 per cent of the children could not complete the schedule as they dropped out after receiving one or two doses. Further probing regarding the reasons for not providing complete immunisation schedule revealed that the mothers were not aware that all the three doses need to be given. Some of the mothers disclosed, during the informal discussions, that they were not particular about the importance of all the three doses. The issue here is that there is a need to ensure that the child who received the 1st dose of OPV/DPT continues to receive the subsequent doses.

All the children (of 1-2 years) were supposed to receive at least two doses of Vitamin A drops. But 70 per cent of the children received only one dose and about one fourth of the children received at least two doses. Here again, mothers were not aware of the number of Vitamin A doses need to be given to the child and hence IEC activities of the programme should address this issue.

Table 8.1b No. of doses received

% of children received	Centres with	
	Trained AWW	Untrained AWW
<u>BCG</u>		
One	94	94
Two	4	3
No response	2	3
Total No. of mothers reporting child recd BCG	253	185
<u>OPV</u>		
One	2	1
Two	7	8
Three	88	89
No response	3	2
Total No. of mothers reporting child recd OPV	260	188
<u>DPT</u>		
One	2	1
Two	8	7
Three	86	89
No response	4	3
Total No. of mothers reporting child recd DPT	246	177
<u>Measles</u>		
One	95	93
Two	3	3
No response	2	4
Total No. of mothers reporting child recd Measles	195	147
<u>Vitamin A</u>		
One	71	70
Two	9	3
Three	15	20
Four	1	1
No response	5	6
Total No. of mothers reporting child recd Vit A	143	88

### Pregnant Women

Analysis of the data on utilisation of immunisation service by the pregnant women is presented in Table 8.1c. On being asked whether they received the TT injection during the last pregnancy, 87 to 89 per cent of the mothers replied affirmatively. Of these, almost 90 per cent received two doses of TT. The first dose was taken during 3-5 months of pregnancy while the second dose was received during 6-7 months.

The task before the functionaries is to make efforts to ensure that the 2nd dose of TT is also given to the small proportion of 5 to 8 per cent of the mothers. Lack of knowledge, inconvenient timings, lack of trust, and inconvenience in leaving home were mentioned as the major constraints in taking TT. These problems can be resolved by effective inter personal communication and motivation so that the women start feeling that TT is necessary, important and trustworthy.

Table 8.1c TT Injection

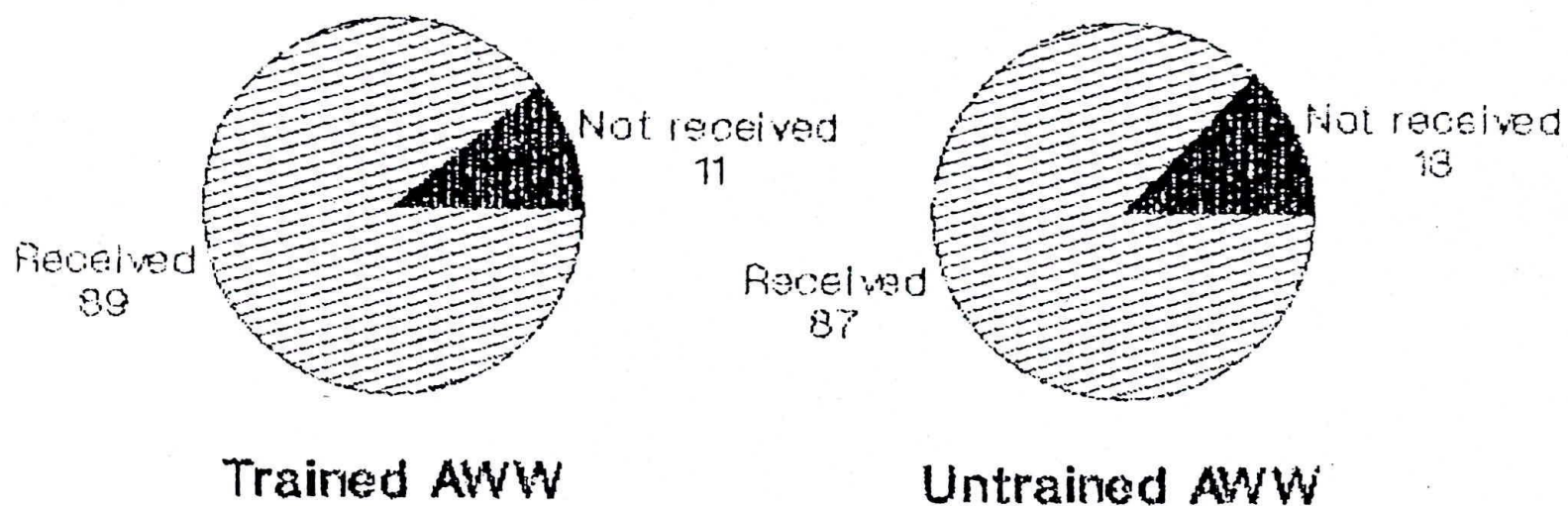
(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
Received TT	89	87 (z = 1.72)**
Total No. of mothers with 0-2 yrs child and aware of TT	437	339
<u>No. of doses taken</u>		
1	8	5
2	91	93
No response	1	2
<u>When received</u>		
<u>1st</u>		
1 - 2	2	1
3 - 5	71	74
6 - 7	25	23
No response	2	2
<u>2nd</u>		
1 - 2	2	1
3 - 5	16	13
6 - 7	80	84
No response	2	2
Total No. of mothers with 0-2 yrs child and recd TT	389	295

\*\* Not significant at 5% level of significance



**Fig.8.2 TT Injection (Pregnant Women)**



## 8.2 HEALTH CHECKUPS

Details about the service of periodic health checkups provided during the antenatal period are presented in Table 8.2a. Proportion of the mothers who had check ups during the last pregnancy was significantly higher among the mothers from the centres with trained AWWs. Most of these (pregnant) women had the first health check up only after the 3rd month of pregnancy. Almost half (46 to 49 per cent) of the mothers had the first check up after 4 months of pregnancy. Proportion of such women was slightly less among the mothers from the centres with trained AWWs.

Majority of the mothers (67 to 69 per cent) had 1 to 3 check ups during the 9 month period of pregnancy. About 12 per cent of the mothers from the centres with trained AWWs had 6 to 9 checkups while only 8 per cent of their counterparts from the centres with untrained AWWs reported so.

General examination (71 to 77 per cent) followed by blood test (53 to 56 per cent) emerged as the major activity carried out during the checkup.

About one third of the mothers got weight measurement and blood pressure reading done during the check ups. Urine test was carried out in case of one fifth of the mothers.

Almost half of the mothers had the weighing done only once or twice during the 9 month period of the last pregnancy. Only 9 to 11 per cent of the mothers got weighted 5 or more times during the nine month period. This again needs attention as frequent weighing is a crucial input to assess the growth and well being of the unborn child.

Regular weighing of the pregnant women must be given more emphasis by the AWWs as this service is provided by them locally whereas rest of the services like urine test, blood test etc. can not be carried out locally or by themselves (AWWs).



AWW is expected to visit the pregnant women so as to provide nutrition and health education regarding the ANC services, maternal diet and other related issues. Towards this end, attempts were made in the present study to ascertain the facts about the same. More than half of the mothers from the centres with trained AWWs reported about the visits by the AWW during their last pregnancy. On the other hand, only 39 per cent of the mothers from the centres with untrained AWWs were visited by the AWW during the pregnancy. Thus, difference between the trained and untrained AWWs in terms of visits by them to the houses of pregnant women was visible and was found to be statistically significant at 5% level of significance.

Centres with trained AWWs present a better picture in terms of utilisation of the service (i.e. health check up), total number of checkups, various things done during the checkup, and visit by the AWW during the pregnancy indicating better performance of the trained AWWs.

On being asked about the reasons for not having health checkups during the last pregnancy, almost half of the mothers from the centres with untrained AWWs reported that they did not know enough about the service. Other problems / constraints mentioned relate to non-provision of the service by the AWW/ANM, inconvenience to leave home, and non-suitability of timings. The untrained AWWs need to make earnest efforts to educate the mothers about the importance of health checkups during the pregnancy.

Issues emerging from the above discussion relate to early initiation of the health checkups, frequency of checkups, importance given to the various components of the health checkup, and frequency of weighing.



Table 8.2a Health checkups - Details

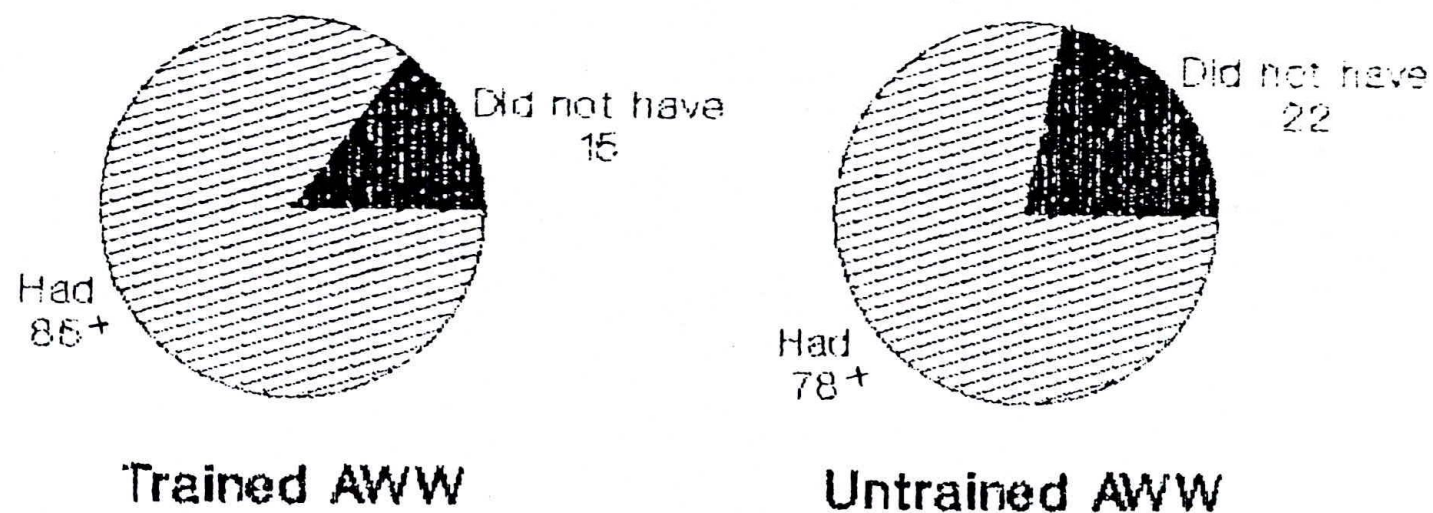
(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
Had Health checkups	85	78 (z = 4.97)*
Total No. of mothers with 0-2 yrs child and aware of checkups	378	366
<u>When was the 1st checkup</u>		
1 - 2 months	3	3
3 - 4 months	48	47
5 - 6 months	37	42
7 - 8 months	9	7
No response	3	1
Total No. of mothers with 0-2 yrs & had checkups	321	286
<u>Total No. of checkups</u>		
1	7	7
2	25	23
3	37	37
4	13	12
5	6	11
6-9	12	8 (z = 3.29)*
No response	2	2
<u>Things done during checkup <sup>(1)</sup></u>		
Genl. Examination	77	71
Blood test	56	53
Weighing	37	36
BP	36	30
Urine test	23	25
<u>No. of times weighed during pregnancy</u>		
1	30	20
2	29	27
3	18	18
4	10	16
5+	9	11
No response	3	9
Visited by AWW during pregnancy	57	39 (z = 8.87)*
Total No. of mothers with 0-2 yrs child and had checkups	321	286

\* significant at 5% level of significance

□ Total exceeds 100 due to multiple response

**Fig.8.3 Health Checkups (Pregnant Women)**



+ Significant at 5% level of significance



### 8.3 GROWTH MONITORING

Details relating to child weighing practices were obtained from the mothers with a child below 6 yrs of age. The results are presented in Table 8.3a.

Three fourth of the mothers reported that they got the youngest child ever weighed. Incidence of low birth weight is one of the causes of higher infant/child mortality in India and its states. To find out the severity of the problem, all the mothers were asked about weight of the child at the time of birth. Analysis of this data presented in Table 8.3a reveals that the problem was not so intensive in the study area.

It is interesting to note that more than four fifth (82 to 85 per cent) of the children were weighed either at the time of the birth or during the first month after the birth. In case of institutional delivery, the child is usually weighed at the institution immediately after the birth. In case of home deliveries, the weight of the new born child is usually recorded by the AWW during the first month after the birth. About 15 to 18 per cent of the children were not weighed at the time of the birth or during the first month after the birth. Mothers of these children need to be sensitised about the weighing at the time of birth or immediately after the birth.

All the children below 3 years need to be weighed every month and those of 3-6 years need to be weighed once in every three months by the AWWs. All the mothers were asked about the number of times the child was weighed during the 12 months period before the survey. More than half of the children were weighed for 1 to 3 times in the reference period (12 months). While only 12 to 16 per cent of the children were weighed for 7+ times in one year.

Analysis by the age of the child revealed that the children of below 3 years of age were not regularly weighed while the pre school children (3-6 years of age) were weighed more regularly. Thus, frequency of weighing needs to be increased for the children below 3 years of age.

The weighing was done mainly at the Anganwadi centre. Most of the mothers (87 to 88%) reported that the AWW interacts with them after weighing the child. AWWs mostly inform the mothers about the weight of the child. Other activities reported include telling about the care to be taken, kind of food to be given, and need for regular weighing. The trained AWWs were able to educate the mothers about the kind of child care measures to be taken up and the kind of food that needs to be given to the child. The training they have received might be helping them to communicate freely with the mothers. This again is a positive sign, which indicates the positive influence of the training on service delivery and quality of care.



Table 8.3a Child Weighing Practice

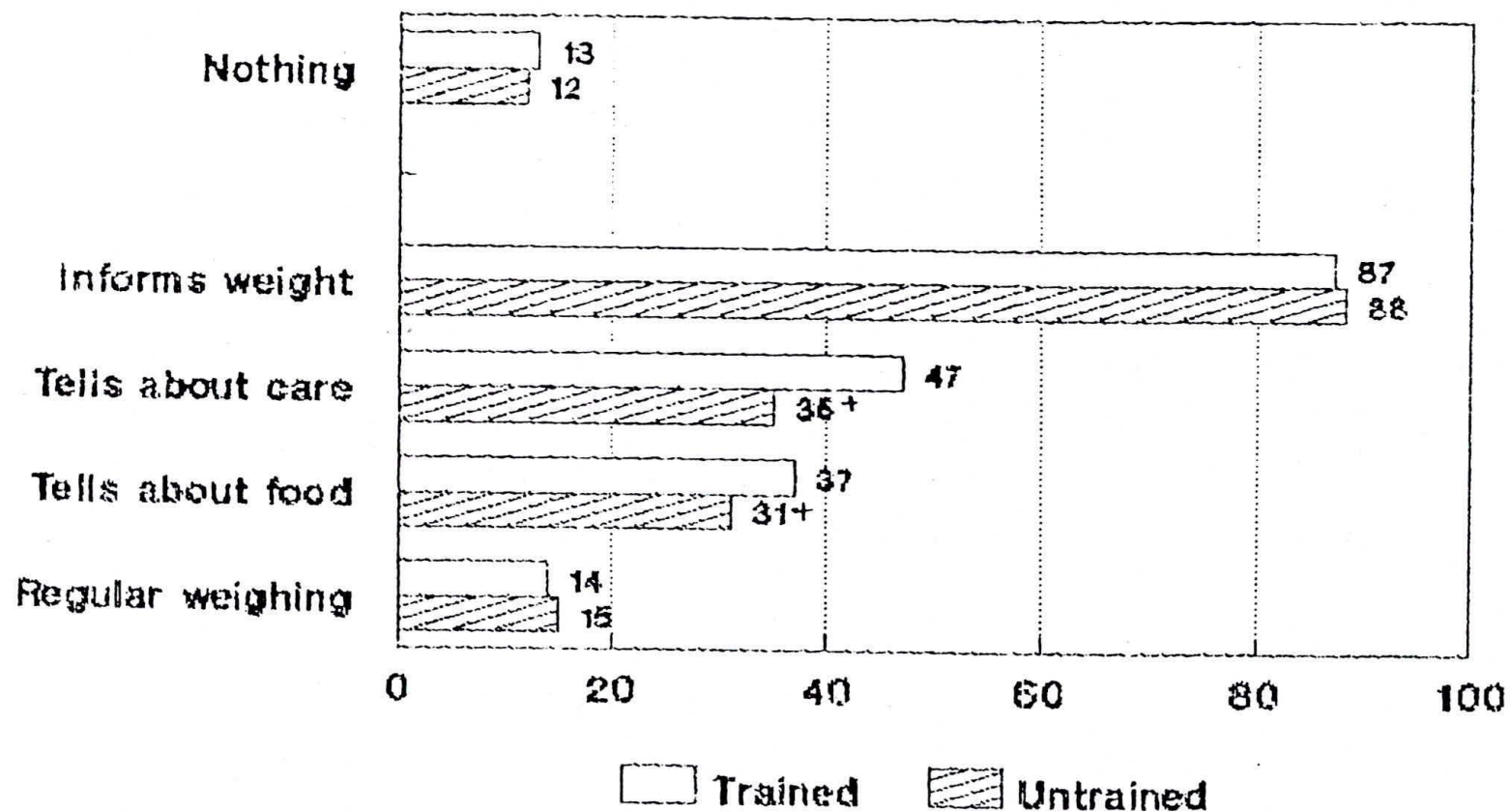
(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
Ever got child weighed	75	75
Total No. of mothers < 6 yrs aware of weighing	789	841
<u>Birth weight</u>		
< 2.5 kgs	7	7
2.5 - 3.0 kgs	27	26
3.1 - 4.0 kgs	14	9
4.1+ kgs	1	2
Not weighed	18	15
Do not know / can't say	32	38
<u>No. of times weighed (last 12 months)</u>		
1 - 3	56	58
4 - 6	22	20
7 - 9	4	2
10 - 12	12	10
Can't say	6	10
<u>Place of weighing</u>		
AWC	85	86
SC/PHC	13	12
Can't say	2	2
<u>Interaction with AWW after weighing<sup>D</sup></u>		
Tells nothing	13	12
Informs weight	87	88
Tells about care to be taken	47	35 (z = 7.69)*
Tells about food to be given	37	31 (z = 4.00)*
Tells about regular weighing	14	15
Total No. of mothers with < 6 yrs child ever weighed	591	409

\* Significant at 5% level of significance

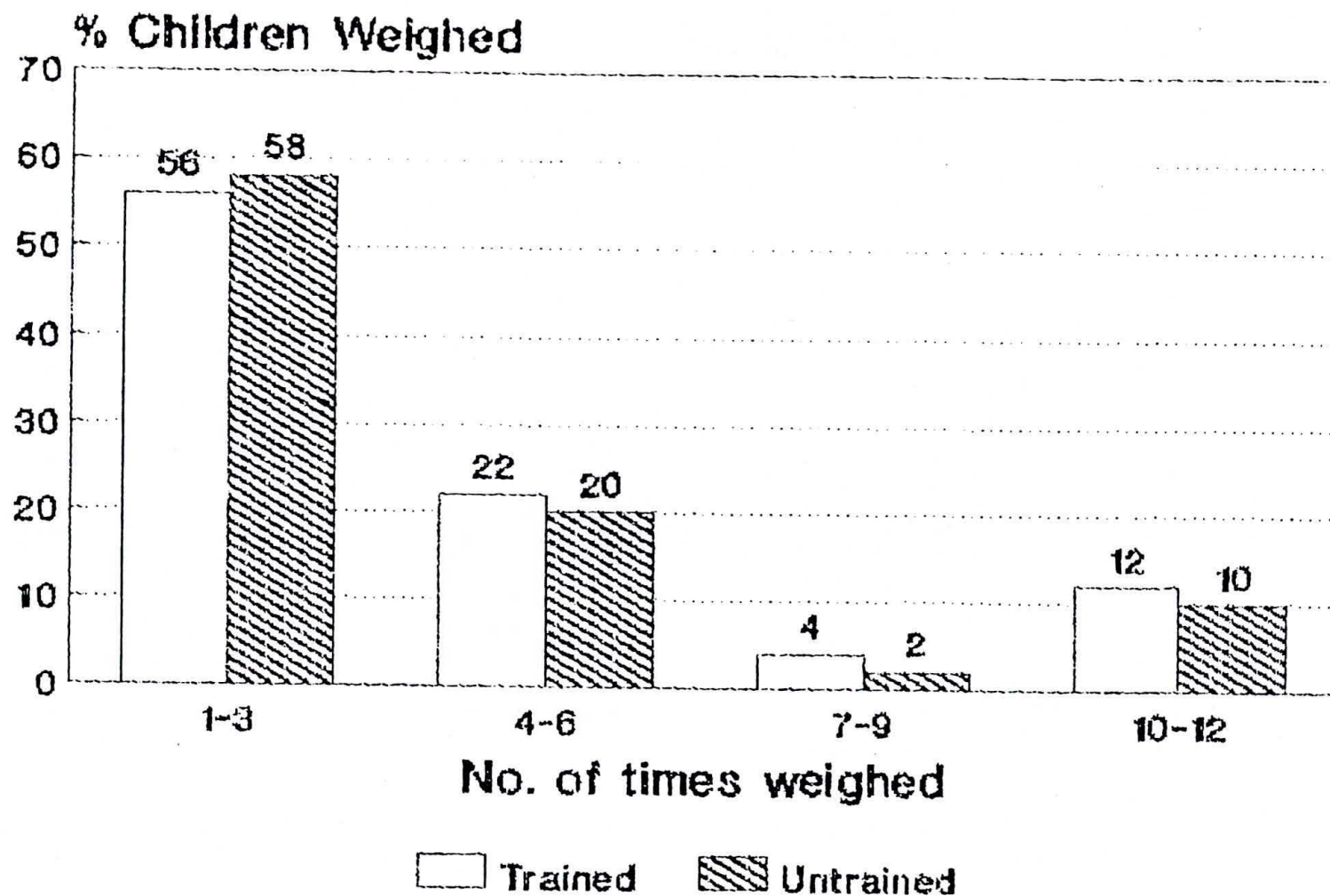
[ ] Total exceeds 100 due to multiple response

**Fig.8.4 Post Weighing Interaction  
(AWW-Mother)**



<sup>+</sup> Significant at 5% level of significance

Fig.8.5 No. of Times weighed (Last 1 yr)





## 8.4 SUPPLEMENTARY FOOD (MOTHERS)

### Utilisation by pregnant women

More awareness about a service is not sufficient and it is expected that the awareness leads to utilisation so that changes take place as envisaged in the project documents.

Analysis of the data relating to utilisation of the service of supplementary food by the pregnant women presented in Table 8.3a indicates moderate levels of utilisation. About one third of the pregnant women did not receive supplementary food from the AWC during the last pregnancy.

The kind of food given to the pregnant women include :

- energy food (unde) for 2 days in a week
- rice (chitranna) for 2 days in a week and
- sweet (pongal) for 2 days in a week

The supplementary food is given to the pregnant woman right from the date of confirmation of the pregnancy. On being asked about the month of pregnancy in which they started taking the food from the AWC, about three fourth of the mothers reported to have started during 1-4 months of pregnancy. About one fifth of the mothers started taking the supplementary food after 4 months of pregnancy. This again needs attention from programme point of view. Efforts must be made to ensure that these women start taking the supplementary food much earlier. By and large, the food was received either upto 9th month or delivery. More women from the villages with trained AWWs received food till delivery.

The findings presented above bring out the necessity for effective IEC programme regarding the time when a pregnant woman should start taking the supplementary food. This can be carried out through housevisits or NHED group sessions.

The supplementary food is given to the nursing mothers upto 6 months after the delivery. But a sizeable proportion (45 to 48 per cent) of the nursing mothers did not receive the supplementary food after the delivery. About one fourth of the nursing mothers received the supplementary food till 6 months or were still receiving the food at the time of the survey. This can be considered as one of the gaps in the service delivery.

The pregnant women /nursing mothers are expected to be given the supplementary food for 25 days in a month. On an average, pregnant women/nursing mothers from the centres with trained AWW received the food for 16 days while the corresponding figure for their counterparts from the centres with untrained AWWs was 19 days.

The programme lays emphasis on spot feeding so that the pregnant women/nursing mothers consumes the entire quantity of the supplementary food given to her so as to meet her nutritional requirements. More than half of the pregnant women/nursing mothers shared the food with others. Proportion of such women was less in the villages with trained AWWs compared to the villages with untrained AWWs.

The IEC activities of the programme should address the issues like early initiation of supplementary feeding, continuation of the same till the child becomes 6 months old, receiving it regularly and spot feeding.

Performance of the trained AWWs appears to be better compared to their counterparts who could not receive the training in terms of providing supplementary food for pregnant women/nursing mothers. The refresher training appears to have helped the AWWs in enhancing their interest in providing the supplementary feeding.

Findings from the participant observation of the AWW/AWC also corroborate the above findings.



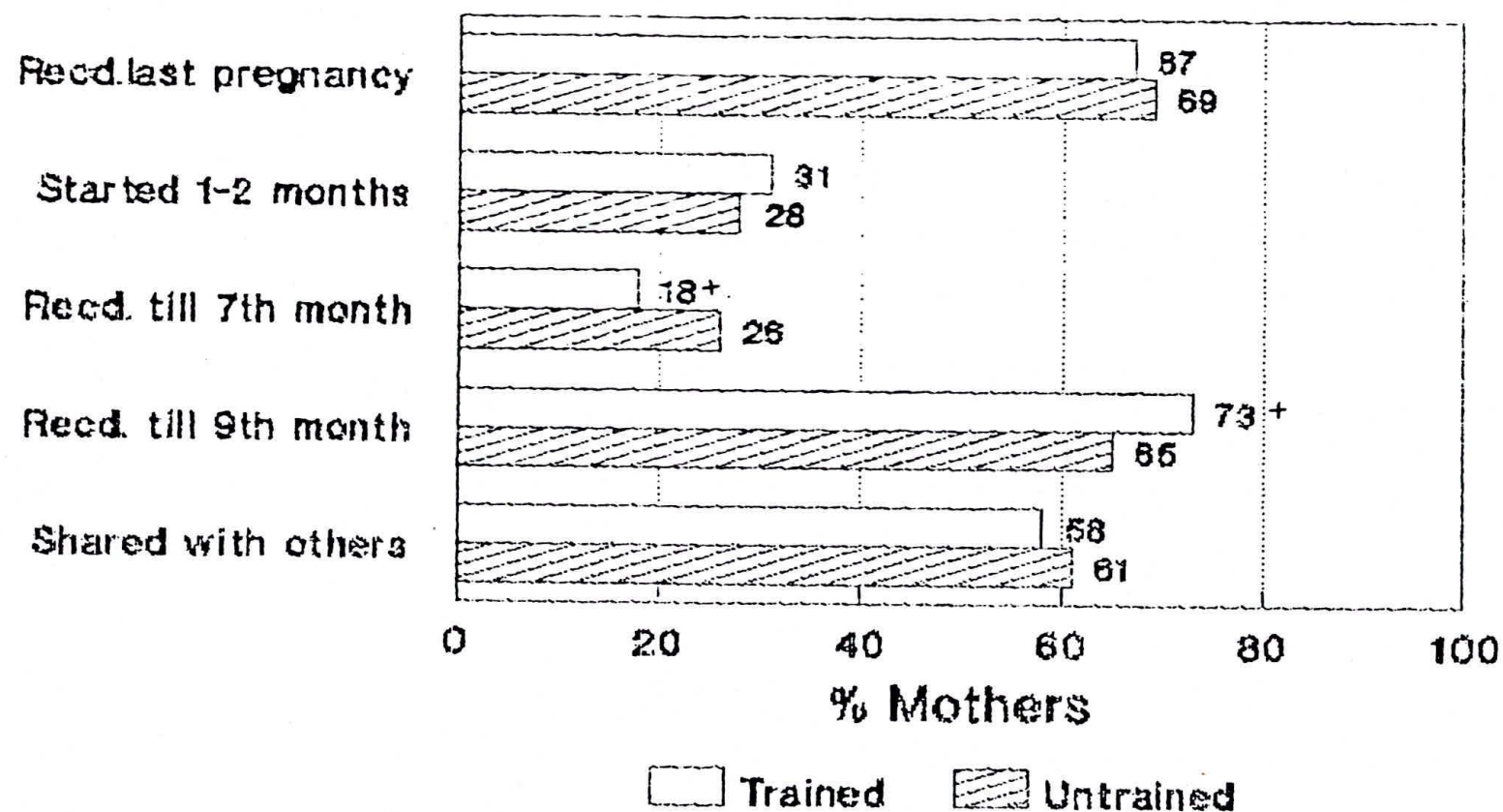
Table 8.4a Supplementary food utilisation by pregnant women (% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
Received suppl. food during last pregnancy	67	69
Total No. Of mothers with 0-2 yrs child and aware of supplementary food	408	316
<u>When started taking food</u>		
1 - 2 months	31	28 (z=1.46)**
3 - 4 months	46	46
5 - 6 months	16	17
7 - 8 months	2	3
Can't say	5	6
<u>Received Till</u>		
7th month or earlier	18	26 (z=4.31)*
8th month or earlier	5	6
9th month / delivery	73	65 (z=4.00)*
Can't say	4	3
<u>Received after delivery till</u>		
3 months or less	12	12
4-5 months	12	14
6 months	14	13
Still receiving	14	12
Not received at all	45	48
Can't say	3	1
<u>No. Of days food received/month</u>		
Upto 10	32	20 (z = 6.31)*
11 - 19	3	4
20 - 25	40	52 (z = 5.45)*
26	16	13
No response	9	11
Mean	16.4	19.1
Total No. of mothers with 0-2 yrs child and recd. supplementary food	273	218
<u>Whether shared with others</u>		
Yes	58	61
No	42	39
Total No. of mothers with 0-2 yrs child and recd. suppl. food	273	218

\* Significant at 5% level of significance



**Fig.8.6 Supplementary Food Utilisation  
by Pregnant Women (Last Pregnancy)**



+ Significant at 5% level of significance

## 8.5 SUPPLEMENTARY FOOD - CHILDREN

All the children of 6 months - 6 years of age are also expected to be given supplementary food by the AWW for 6 days in a week.

All the mothers with a child of 1-6 years were asked a series of questions relating to utilisation of supplementary food by the children. Analysis of the data is presented in Table 8.5a.

Most of the mothers (86 to 87 per cent) reported that the child had ever received the supplementary food from the AW centre. And most of these children were still receiving the supplementary food from the AWC at the time of the survey.

Almost four out of five children received the supplementary food for at least 21 days in a month. This is a good sign because regular feeding is useful for the child.

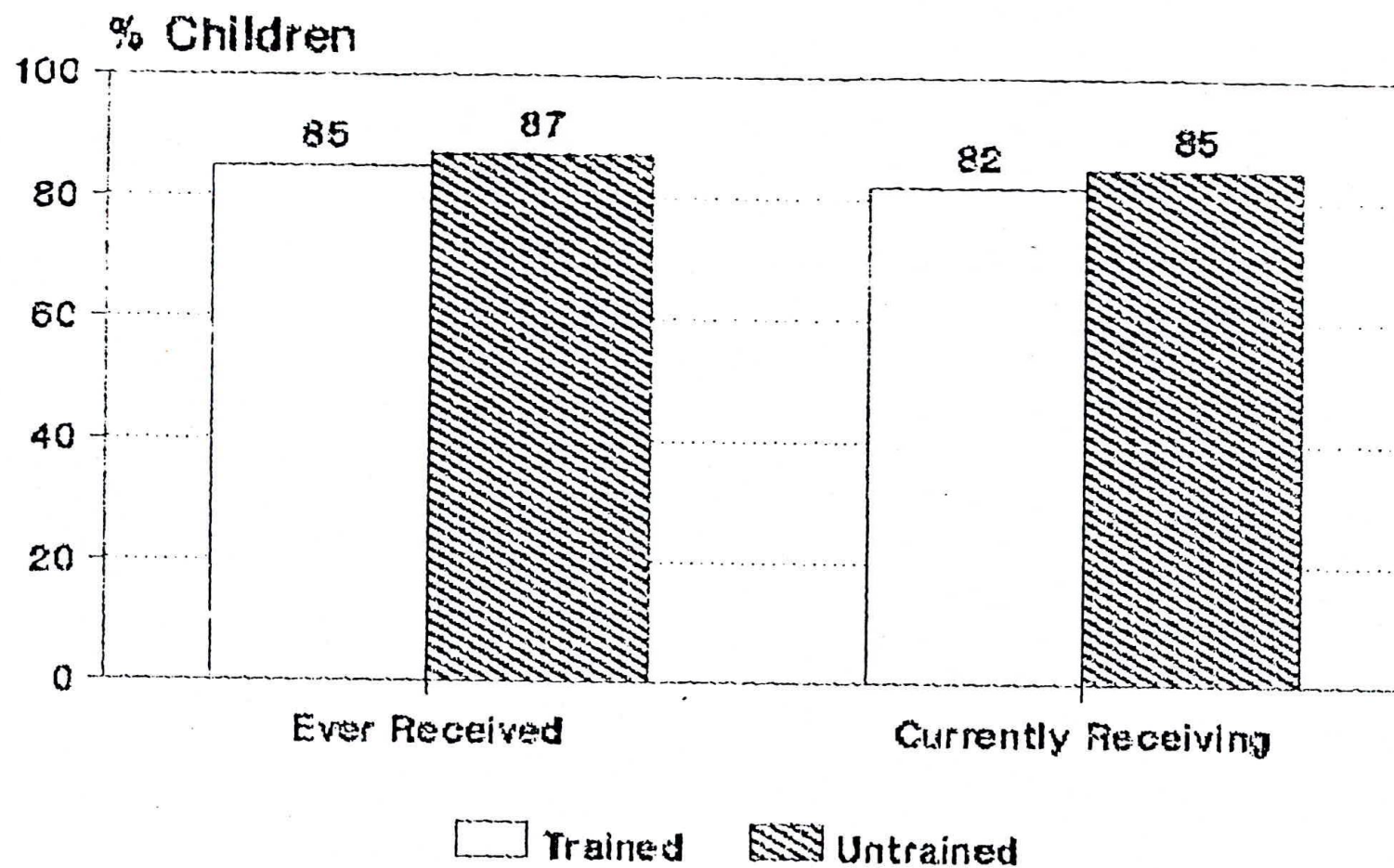
Of all the children who receive food at home, more than half share the same with others. This needs to be discouraged because the supplementary food given to the child would suffice his/her nutritional requirements. And hence, efforts to ensure more spot feeding are needed to improve the situation.

Table 8.5a Supplementary food utilisation by children

(% mothers)

	Centres with	
	Trained AWW	Untrained AWW
Child ever received supplementary food	85	87
Child still receiving supplementary food	82	85
Total No. of mothers with 1-6 yrs child & aware of supplementary food	702	474
<u>No. of days / month received food</u>		
Upto 10	6	1
11 - 15	4	4
16 - 20	8	8
21 - 25	60	63
26	19	17
Can't say	3	7
Shared with others	55	59
Total No. of mothers reporting that food taken at home	128	77

**Fig.8.7 Suppl. food utilisation by Children**





### To sum up

Extent of utilisation of the child immunisation services was very high across the study area. Proportion of children who received Measles Vaccine and Vitamin A drops was significantly higher in the centres with trained AWWs.

Proportion of the mothers who received TT injection during the last pregnancy was higher in the centres with trained AWWs.

Proportion of the mothers who had health checkups during the last pregnancy was also significantly higher among the mothers from the centres with trained AWWs. Mothers from the centres with trained AWW had significantly higher number of health checkups during the last pregnancy than their counterparts from the centres with untrained AWWs. These mothers had greater interaction with the (trained) AWW during the last pregnancy.

About three fourth of the mothers got their children of 0-6 years ever weighed. Children from the centres with trained AWWs were weighed more frequently or regularly compared to their counterparts from the centres with untrained AWWs.

Trained AWWs were observed to be performing better in terms of post weighing interaction with mothers regarding the care to be taken, food to be given etc.

More than two third of the mothers reported to have received the supplementary food during the last pregnancy. Proportion of mothers who received the supplementary food till 9th month of pregnancy / delivery was significantly higher in the centres with trained AWWs.

More than four fifth of the children were receiving supplementary food from the AWC. Sharing of food was more commonly observed among the children from the centres with untrained AWWs.

**CHAPTER 9****CONVERGENCE OF SERVICES**

The ICDS programme envisages close coordination between ICDS, and other departments providing supportive services such as Adult Literacy, Education, Rural Development, Health, Panchayat Raj etc.

To get an idea about the involvement of the AWWs in the activities of other departments, all the AWWs were asked about the proportion of their time devoted to work of non ICDS departments. In response to this question, about half (51-52 per cent) of the AWWs reported to be spending about one fourth of the time on non ICDS work such as Family Planning, Literacy, DWCRA, MSY etc. About 29 to 33 per cent of the AWWs devote about half of their time for non ICDS work. This clearly illustrates the active involvement of the AWWs in promoting other supportive services. This is commendable in view of their busy schedule at the AW centre. This observation was supported by the responses of other functionaries like Supervisor, CDPO, Assistant Director, PO and AWIC functionaries. The message is that the ICDS functionaries take active interest in the programmes of other departments.

All the AWWs were asked about the specific joint activities carried out by them with the functionaries of the health department. The success of the ICDS programme depends on the coordination between the health department and ICDS as the health components covered under the ICDS need greater cooperation from the health department.

Almost all the AWWs reported that they carry out joint activities with the health functionaries - ANM, LHV and MO. The kind of activities carried out jointly by the AWW and the health functionaries include :

- Immunisation (with ANM, every month)
- Health checkups (with MO, ANM, LHV, once in 2-3 months)
- Ante and post natal care services (with ANM, every month)
- NHED sessions (with ANM, every month)
- Family planning motivation (with ANM, every month)

No significant difference was noticed between the trained and untrained AWWs in terms of joint activities carried out with the health functionaries.



The extent of coordination between the health and ICDS functionaries at higher levels was also noticed to be high with almost all the supervisors and CDPOs reporting that they carry out the activities listed below, with the health functionaries (like LHV and MO).

- Joint meetings at sector and project level
- NHED camps
- Joint Supervision

According to the district level officials, block level coordination committees have been formed in all the ICDS blocks of the district. The committee has Assistant Commissioner as Chairman, CDPO as Secretary, and MO, BDO and BEO as members. In some of the blocks, committees are not able to meet regularly. Earnest efforts to ensure that the committee meet regularly to discuss and resolve the problems will help in improving the coordination between the various departments.

All the ICDS functionaries were asked about the kind of help/assistance they receive from the functionaries of other departments. All of them responded positively and the responses are as follows :

- Education Department in providing (school) building for AWC
- Rural Development & Panchayat Raj Department in providing building / accommodation for AWC
- BDO / Village Panchayat in providing fuel expenses for supplementary food preparation (Rs.75 per month per AWC)
- Health Department in organising health checkups and immunisation.
- Sanitation Department in providing hand pump / drinking water source (near the AWC)

In many of the villages, Mahila Bala Vikas Samithi was formed with the Woman Panchayat Member as the chair person. This also lead to greater involvement of the Gram Panchayat in the activities of the AWC.

The ICDS functionaries at various levels are satisfied with the way other departments are helping them.

However, some of the constraints highlighted by the functionaries given below need to be looked into by the Programme Managers.

- Vacancy of about 50 per cent of the MO posts (one MO for 2 PHCs) affecting the frequency of organising health checkups.
- Non availability of vehicle for joint visits

Some of the suggestions put forth by the functionaries to improve the convergence of services include :

- Regular (monthly) review meetings as per the schedule
- Joint visits
- Joint workshops at block/district level to discuss and resolve problems
- Visits by the officials of other departments to AWCs during their visit to the village.

### **To sum up**

The AWWs reported their active involvement in the activities of non ICDS departments providing supportive services in the villages like Family Planning, Literacy, DWRA, MSY etc. The senior officials also reported active involvement of ICDS functionaries in providing other supportive services. Joint activities carried out by the Health Department and ICDS in providing health check ups, immunisation, ante natal and post natal care services etc. was also highlighted by the functionaries of Health Department as well as ICDS. The study also highlights the higher levels of coordination between ICDS and other departments like Health, Education, Rural Development, Panchayat Raj, Sanitation etc. So ICDS appears to be helping in achieving the convergence of different services provided in the villages and urban slums.

Vacancy of MO posts, non availability of vehicle, and inability to have regular meetings emerged as the major constraints regarding inter departmental cooperation/coordination. The suggestions put forth by the functionaries include regular review meetings, joint visits and joint workshops. To enhance the coordination/cooperation between the Health Department and ICDS in the World Bank assisted ICDS blocks of Andhra Pradesh, MODE has developed a strategy which involves preparing monthly schedule for carrying out joint activities by the functionaries of both the departments. Perhaps this can be tried out by the Department of Women and Child Development in Karnataka also. Similarly, ICDS vehicle can be provided to the MO for attending the ICDS meetings and visiting the AW centres. These steps could further enhance the extent of inter departmental coordination / cooperation at various levels across the state



**CHAPTER 10**  
**COMMUNITY PARTICIPATION**



Involvement of the local community leaders, mothers and mahila mandal members in AWC activities would go a long way in improving the utilisation of ICDS. Towards this end, all the AWWs are expected to make efforts to involve the local community in the AWC activities. Active participation of the local community in the AWC activities can be considered as an achievement of the AWW in mobilising the community support. The innovative refresher training imparted to the AWWs is also likely to have a bearing on the ability of the AWWs in mobilising community support as community mobilisation/participation was one of the issues covered in the refresher training. Improvement in the ability to interact with the CLs was perceived by the AWWs as one of the benefits derived from the innovative refresher training. In this chapter, an attempt is made to understand the extent of involvement of the local community in the ICDS Programme and assess the impact of the refresher training on community involvement or participation.

### **10.1 AWW's RESPONSE**

All the AWWs interviewed were asked a series of questions about the involvement of community leaders, mothers and mahila mandal members in the AWC activities.

Table 10.1a gives the results relating to the involvement of CLs, Mothers and Mahila mandal members in the AWC activities.

Table 10.1a Activities in which CL, Mother and MMM help

(% AWWs)

Activity	CL		Mother		MMM	
	Trained	Untrained	Trained	Untrained	Trained	Untrained
Preschool running	16	14	24	19	3	2
Suppl food preparation	16	15	27	20	1	1
Organising meeting	32	27	35	30	11	7
Arrange accommodation	29	23	4	4	0	0
Immunisation	10	6	35	26	0	0
Food distribution	3	3	16	13	1	1
Escorting children for PSE /SNP	3	3	21	17	2	1
Arranging drinking water	4	3	7	6	5	2
No help	20	24	25	35	62	67
	(z = 4.99) *		(z = 11.38) *		(z = 3.23) *	
Total No. of AWWs	1485	1180	1485	1180	1485	1180

CL = Community Leader      MMM = Mahila Mandal member

PSE = Pre School Education    SNP = Supplementary Nutrition Programme

\* Significant at 5% level of significance

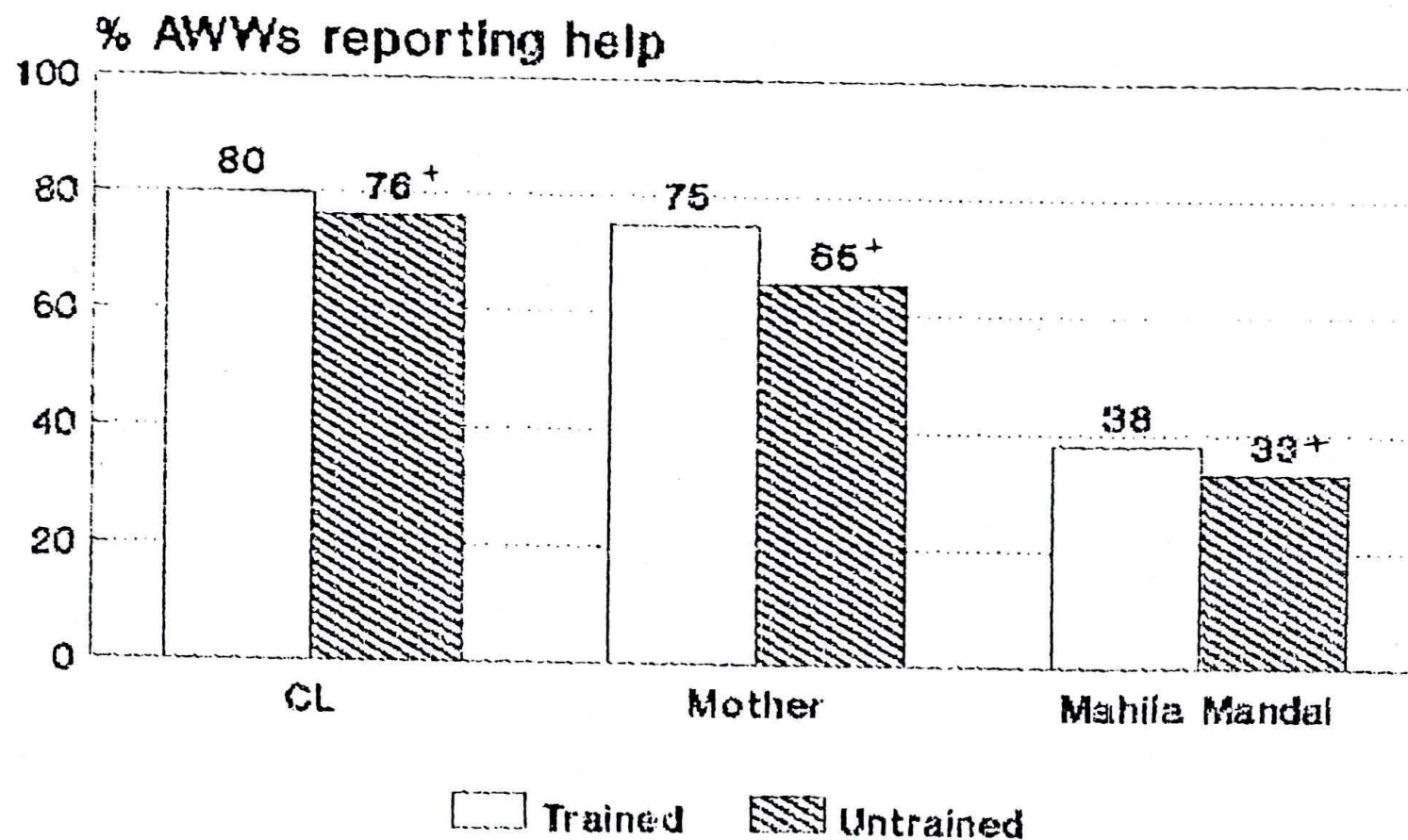
Note : Total exceeds 100 due to multiple response.

More than three fourth of the AWWs reported about the involvement of the CLs while more than half of the AWWs reported about the involvement of the Mothers in the AWC activities. This indicates higher levels of involvement of the CLs and mothers in the AWC activities.

Proportion of AWWs reporting about the help extended by the CLs, Mothers and Mahila mandal members was significantly higher among the trained AWWs. And the difference between the trained and untrained AWWs was found to be statistically significant at 5% level of significance. Cooperation of the Community Leader was more pronounced in activities like organising meetings and arranging accommodation, while involvement of the mothers was reported more in activities such as organising meetings, immunisation, supplementary food preparation, pre school and escorting children to AW centre.



Fig. 10.1 COMMUNITY PARTICIPATION



<sup>+</sup> Significant at 5% level of significance



In case of the mahila mandal members, help in organising meetings was mostly mentioned by 7 to 11 per cent of the AWWs. However, not much involvement of the mahila mandal members was reported by the AWWs - trained as well as untrained. Most of the AW centres did not have mahila mandals - 62% trained AWWs and 67% untrained AWWs reported about non existence of mahila mandal in their village.

Extent of involvement of the community leaders and mothers in ICDS activities was found to be high in the study area. This shows that the local community was evincing interest in the ICDS activities.

Situation regarding the involvement of the community leaders in the AWC activities appears to be significantly better in the centres with AWWs who received the refresher training compared to the centres with AWWs who could not receive the refresher training.

The innovative refresher training appears to have exerted positive influence on the community participation in the AWC activities. Improvement in the ability of the AWWs in mobilising the community support and communication skill, and enhanced interest to perform better (reported as the benefits derived from the innovative refresher training) could have brought in the desired and expected changes in the community involvement or participation in the AWC activities.

On being asked about the action to be taken to improve the extent of cooperation from the local community, the AWWs put forth the following suggestions :

- Creating more awareness about the ICDS
- Organising meetings to motivate the community leaders, mothers and mahila mandal members
- Regular interaction between the senior functionaries / officials of ICDS and mothers, community leaders and mahila mandal members.
- Assigning responsibilities to Community Leaders, mothers and mahila mandal members.

## 10.2 MOTHER'S RESPONSE

All the mothers interviewed in the study were asked about the involvement of the mothers in the AWC activities. Table 10.2a gives the analysis of their responses.

Table 10.2a Involvement of Mothers

(% Mothers)

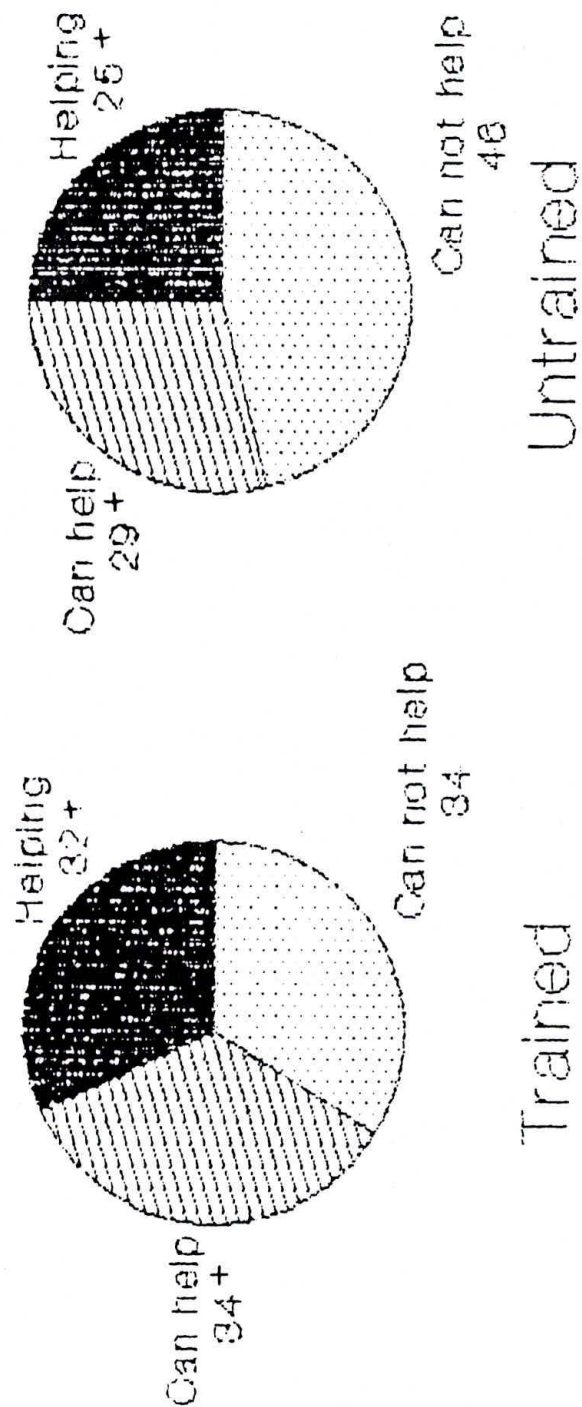
	Centres with	
	Trained AWW	Untrained AWW
Mothers of the village help AWW	32	25 ( $z = 9.36$ )*
Total No. of Mothers	941	668
Mothers can help	34	29 ( $z = 3.02$ )*
Total No. of mothers who reported Mothers do not help in AWC activities	640	501
<u>Kind of activities</u>		
Weighing	21	8 ( $z = 7.05$ )*
Immunisation	37	34 ( $z = 1.22$ )**
Bringing children to AWC	39	34 ( $z = 2.02$ )*
Food preparation	13	6 ( $z = 4.52$ )*
Total No. of mothers who reported mothers help	208	167

Note : Total exceeds 100 due to multiple response

\* Significant at 5% level of significance

\*\* Not significant at 5% level of significance

More than one fourth of the mothers (25 to 32 per cent) reported that they help the AWW in the AWC activities. About one third of the mothers reported that the mothers can help the AWW in one way or the other. That is, about two third of the mothers were either helping or willing to help the AWW. This indicates moderate level of participation of the mothers in the ICDS activities.

**Fig.10.2 Mothers Involvement**

+ Significant at 5% level of significance



Table 10.2a reveals the difference in the extent of involvement of the mothers in the AWC activities between the centres with trained AWWs and centres with untrained AWWs. The difference between the two types of the AWCs in all the cases were found to be statistically significant at 5% level of significance.

More than half (54 to 66 per cent) of the mothers reported that they were either already helping or can help the AWW. This is a good sign. However, the concern is that 34 to 46 per cent of the mothers either did not report the involvement of mothers or they were not optimistic about their future involvement. This target group needs to be approached and motivated so as to facilitate their involvement and active participation in the ICDS programme.

The difference noticed between the centres with trained AWWs and untrained AWWs in terms of extent of involvement of the mothers in various kinds of activities (eg. Weighing) was observed to be statistically significant at 5 per cent level of significance.

In spite of better performance in the centres with trained AWWs, involvement of the mothers appears to be a problem area across the study area, as about two third of the mothers reported that the mothers of the village do not help the AWW in her activities. The reasons cited for this mainly related to lack of sufficient knowledge about the ICDS programme and the kind of role they can play. Some of the mothers think that it is government's responsibility to run the AWW centre and the community has nothing to do with it. This needs to be addressed through effective communication and motivation campaign, with involvement of the senior functionaries / officials.

Majority (65 to 75 percent) of the AWWs reported that the mothers in the village help them in their activities, while only 25 to 32 percent of the mothers reported so. Though the mothers were asked about the involvement of any of the mothers in AWC activities, the mothers more often responded about their own involvement. These mothers being mothers of small children may not be able to get involved in the AWC activities, because of their preoccupation with household chores and child rearing activities.

**To sum up**

Extent of involvement of the community leaders and mothers in the AWC activities was observed to be more in the study area indicating active participation of the local community in the ICDS activities.

Situation regarding the involvement of the local community in the AWC activities was significantly better in the centres with AWWs who received the innovative refresher training compared to those centres with AWWs who could not receive the refresher training.

**CHAPTER 11**  
**OTHER ISSUES**



## 11.1 NUTRITION AND HEALTH EDUCATION - HOUSE VISITS

AWWs provide Nutrition and Health Education to the women of the village through regular house visits (inter personal contacts). Attempts were made in the study to find out the status regarding NHED through house visits.

### AWW's response

All the AWWs were asked about the frequency of house visits, the kind of houses given priority, number of houses covered during the last visit and the time spent with each woman. Analysis of this data is presented in Table 11.1a and Table 11.1b.

By and large, all the AWWs were able to make house visits. And most of them reported that they go on house visits every day. Proportion of AWWs reporting daily house visits was significantly higher among the trained AWWs, compared to the untrained AWWs.

A small proportion (1 to 3 per cent) of the AWWs reported that they go on house visits once in one or two weeks.

Majority of the AWWs (about two third) visit the houses on priority basis with more priority given to the children not coming to the anganwadi centre, immunisation drop out, and at risk mothers. Houses with referral cases, pre school drop out, and grade III and IV children were also given priority by the AWWs. Proportion of the AWWs giving priority of houses with mal nourished children and at risk mothers was significantly higher among the trained AWWs.

About half of the AWWs reported to have visited 1-2 houses during the last time they made house visits while more than 90 per cent of the AWWs visited 1-5 houses. On an average, the AWWs visited 3.3 to 3.6 houses in a day. The difference observed between the trained and untrained AWWs was found to be statistically insignificant (at 5% level of significance).

About one fourth of the AWWs reported to have spent more than 20 minutes with each woman while another one fourth of the AWWs reported the time spent as 10 minutes.

More than three fourth of the AWWs make house visits everyday. But the only concern is that some of the AWWs (1 to 5 per cent) were not visiting the houses even weekly once as they stay in a near by village. They can easily visit the houses by staying in the AWC village as the mothers can be met when they are available at the houses. These AWWs need to be motivated to ensure that they make house visits at least twice a week so as to provide the necessary NHED inputs to the mothers.

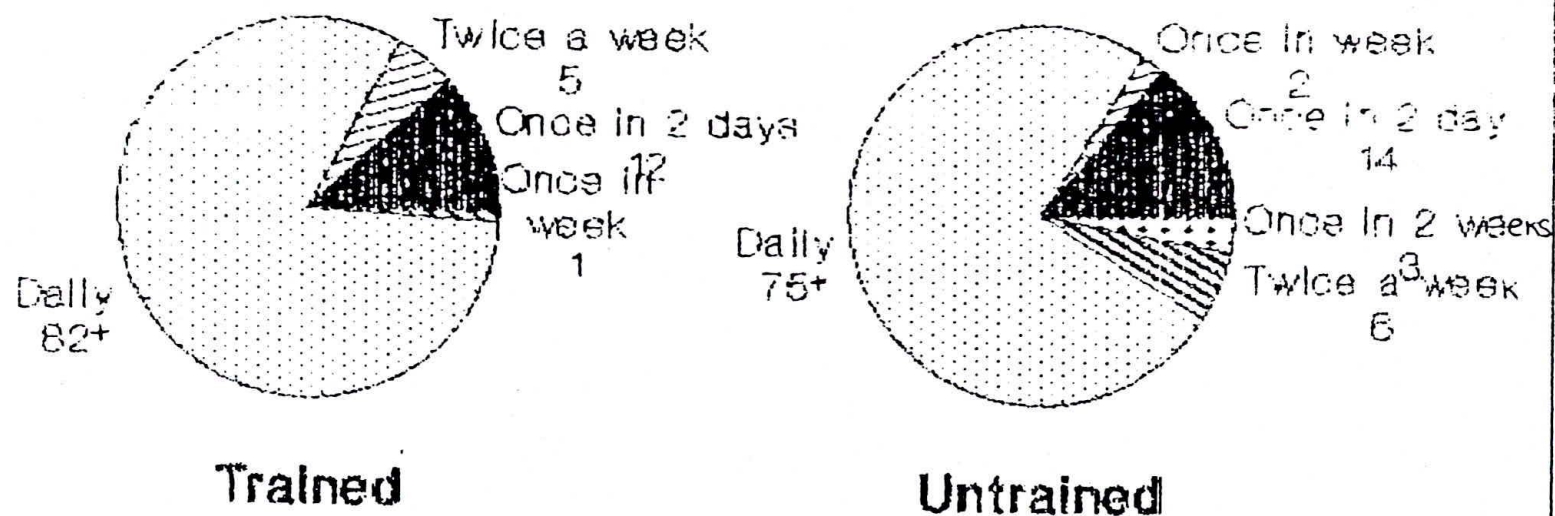
Table 11 1a House visits (AWW's response)

	(% AWWs)	
	Trained	Untrained
Able to do house visits	91	93
Total No. of AWWs reported house visits	1275	1030
<u>Frequency</u>		
Daily	82	75 ( $z = 28.1$ ) *
Once in 2 days	12	14
Twice a week	5	6
Once a week	1	2
Once in 15 days	0	3
Visits houses on priority basis	67	64
Total No. of AWWs	1485	1180
<u>Priority given to</u> □		
Immunisation drop out	57	55
Children not coming to AWC	63	64
Gr. III & IV children	32	28 ( $z = 4.00$ ) *
Referral cases	37	40
Preschool dropout	35	39
At risk mothers	42	39 ( $z = 2.50$ ) *
Total No. of AWWs visit on priority basis	991	758

\* Significant at 5% level of significance

□ Total exceeds 100 due to multiple response

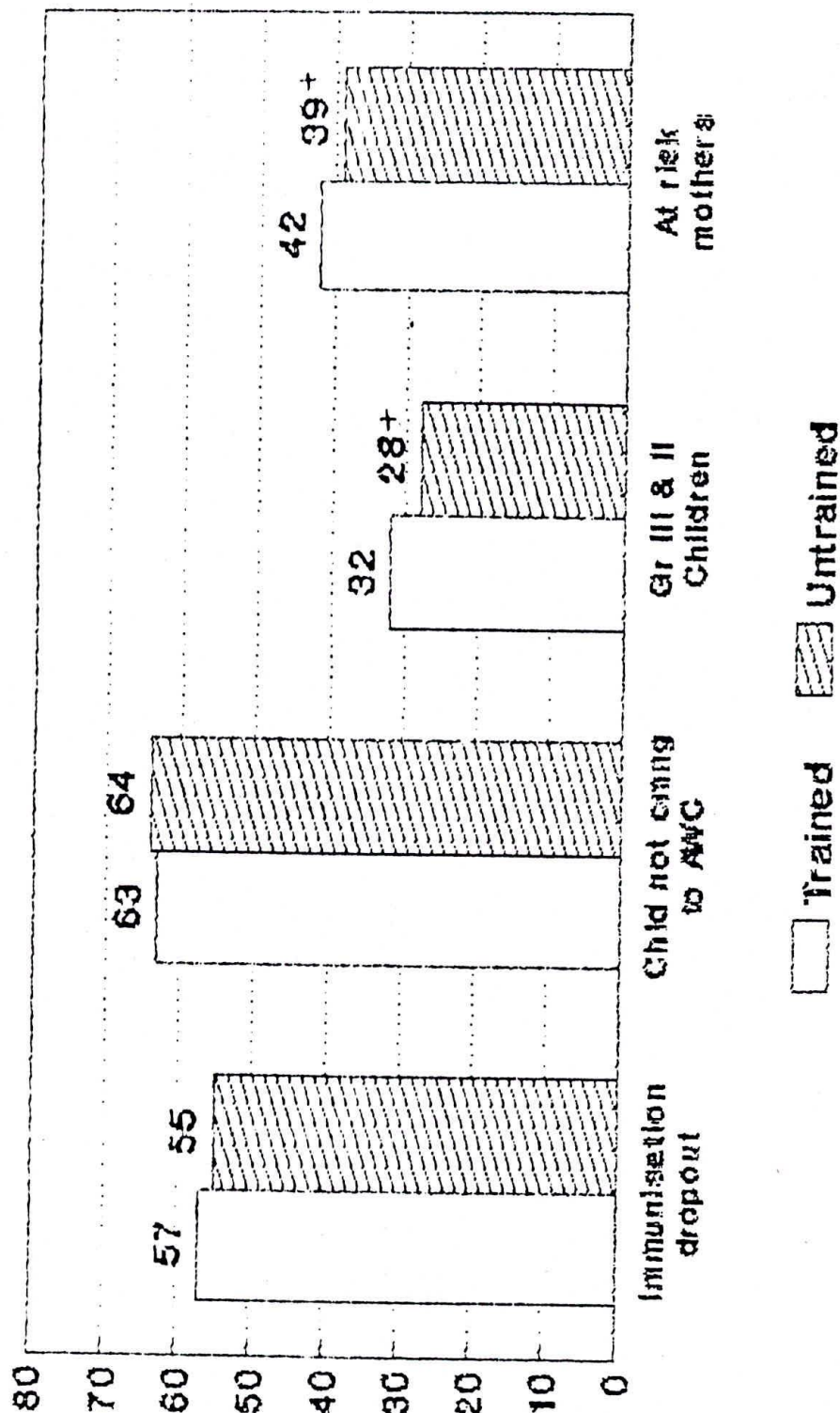
Fig.11.1 Frequency of House Visits  
by AWWs



<sup>+</sup> Significant at 5% level of significance



Fig.11.2 Houses Given Priority by AWWs



+ Significant at 5% level of significance

Table 11.1b Details about last visit (AWWs response)

	(% AWWs)	
	Trained	Untrained
<u>No. of houses covered</u>		
1 - 2	55	52
3 - 5	38	40
6 - 8	4	4
9 -10	3	4
Mean	3.3	3.6
SD	4.5	11.2
<u>Time spent (minutes)</u>		
Upto 10	25	26
11 - 20	46	42
21 - 30	23	25
31 +	6	7
Total No. of AWWs	1485	1180

**Mother's response**

All the mothers interviewed in the study were asked about the frequency of house visits, time spent and issues discussed. Analysis of this data is presented in Table 11.1c.

On being asked about the frequency of house visits by the AWW, only 13 to 14 per cent of the mothers reported it as once in 1-2 days. About one fifth of the mothers reported that the AWW visits the houses monthly once. One plausible explanation for these responses to be different from the stated response of the AWWs is that the AWW might have visited rest of the houses about which the mother perhaps was not aware. The AWW spent less than 10 minutes according to majority of the mothers (42-44 per cent). The time spent by the AWW was 11-20 Minutes according to one third of the mothers.

The discussion during the house visit by the AWW centered around immunisation, pre school, health issues, supplementary food and nutrition related issues. Growth monitoring was mentioned by a small proportion (3-5 per cent) of the mothers. Earlier discussion has brought out the necessity to sensitise the mothers about the importance of regular weighing of the child. Perhaps this is not receiving adequate attention from the AWWs, while imparting Nutritional Health Education.

Table 11.1c House visits (Mothers response)

	Centres with (% Mothers)	
	Trained AWW	Untrained AWW
<u>Frequency</u>		
Daily	8	9
Once in 2 days	5	5
Twice a week	14	13
Once a week	31	31
Once in 15 days	9	9
Monthly	21	22
Once in 2+ months	13	10
Total No. of mothers reporting HVs by AWW	594	454
<u>Time spent (minutes)</u>		
Upto 10	42	44
11 - 20	33	39
21 - 30	20	10
31+	5	7
<u>What discussed</u> <input type="checkbox"/>		
Preschool	49	50
Supplementary food	31	27
Immunisation	53	52
Health issues	43	43
Nutrition	23	21
AN/PN Services	7	12
Family Planning	6	6
Growth monitoring	5	3
Total No. of mothers reporting HVs by AWW	594	454

☐ Total exceeds 100 due to multiple response



## 11.2 NHED GROUP SESSIONS

### AWW's response

All the AWWs are expected to organise group sessions or NHED meetings for the mothers once in a month. Attempts were made in the study to assess the performance of the AWWs in terms of frequency of the sessions, time spent, issues discussed and use of the audio visual aids. Analysis of the data pertaining to these issues is presented in Table 11.2a and Table 11.2b.

Almost all the AWWs reported that they organise NHED sessions. The sessions are by and large, organised every month (about two third reported so). About one fourth of the AWWs organise 2-3 sessions in a month. (Table 11.2a).

On being asked about the last session, most of the AWWs (80-89%) reported that the last session was held during 1 to 4 weeks before the date of the survey. Proportion of AWWs who organised the last NHED session more than 4 weeks ago was significantly higher among the untrained AWWs. This indicates that the trained AWWs organise NHED sessions more often.

More than four fifth of the AWWs reported to have spent more than 45 minutes in the last NHED session.

Immunisation, nutrition issues and health issues were the main topics discussed during the NHED sessions. Other issues discussed included supplementary food, ante natal and post natal care, pre school, family planning and growth monitoring. Here again, growth monitoring did not receive the priority it needs (only 6 to 7 per cent of the AWWs reported about it).

Four fifth of the AWWs reported the use of audio visual aids during the session. Charts were used by most of the AWWs with immunisation card and poster being the other aids used (Table 11.2b).

Non availability of the aids (due to non replenishment) emerged as the major constraint in using audio visual aids.

The trained AWWs organise the NHED sessions more frequently and they use aids during the sessions. Better understanding of the use of the audio visual aids was perceived by the AWWs as one of the benefits derived from the refresher training. And this perhaps holds the key for the better performance of the trained AWWs regarding the NHED group sessions.

Table 11.2a NHED Sessions (AWW's response)

(% AWW)

	Trained	Untrained
Organise NHED Sessions	99	97
Total No. of AWWs	1485	1180
<u>Frequency</u>		
2-3 times a month	26	26
Once a month	65	64
Once in 2-3 months	9	10
<u>Last session held</u>		
Upto 4 weeks ago	89	80
More than 4 weeks ago	11	20
<u>Time spent (minutes)</u>		
16 - 30	10	9
31 - 45	9	8
46 - 60	37	15
61 -120	34	14
121+	10	14
<u>Issues discussed</u> <input type="checkbox"/>		
Pre school	21	24
Supplementary food	36	37
Immunisation	69	68
AN & PN Services	32	35
Health issues	47	46
Nutrition issues	56	52
Family Planning	11	15
Growth Monitoring	7	6
Total No. of AWWs organise NHED	1471	1148

☐ Total exceeds 100 due to multiple response

**Fig.11.3 Frequency of NHED Sessions**

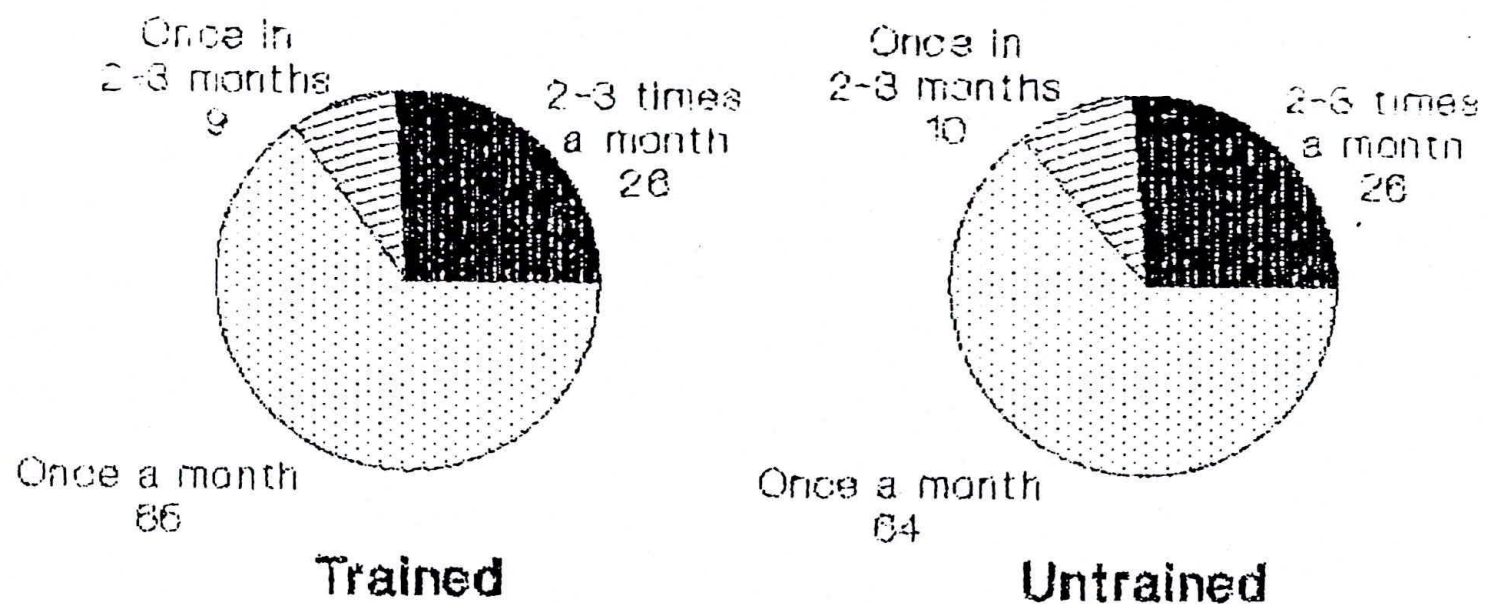
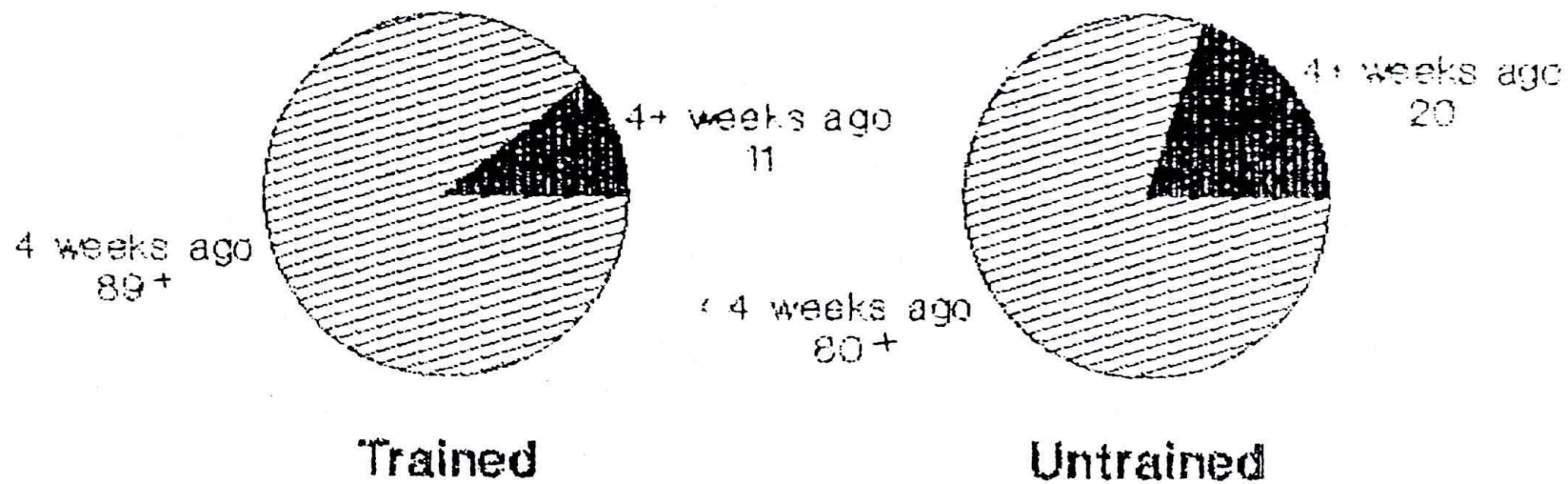




Fig 11.4 Last NHED Session



+Significant at 5% level of significance

Table 11.2b Use of AV Aids by AWWs

(% AWWs)

	Trained	Untrained
Use Aids	80	78 (z = 7.96)*
Total No. of AWWs organise NHED	1471	1149
<u>Type of aids used</u> <input type="checkbox"/>		
Flip chart	6	4
Poster	35	32
Chart	80	83
Immunisation card	47	47
Total No. of AWWs used aids	1177	892
<u>Reasons for not using aids</u>		
Do not have aids	64	66
No sufficient place to hang charts	3	6
Do not feel it necessary	13	12
Others	4	4
Can't say	16	12
Total No. of AWWs did not use aids	274	237

☐ Total exceeds 100 due to multiple response

\* Significant at 5% level of significance

### Mother's response

On being asked about the NHED sessions conducted by the AWW, 30 to 34 per cent of the mothers reported that they were aware of such sessions.

All the mothers who were aware of the NHED sessions organised by the AWW were asked about the frequency, time spent, issues discussed and AV aids used. Analysis of this data is presented in Table 11.2c and Table 11.2d.

More than three fourth (76 to 83 per cent) of the mothers reported that the NHED sessions are usually organised by the AWW at least once in a month. According to more than half of the mothers, the last NHED session was organised 1 to 4 weeks before the date of the survey. The conclusion is that the NHED sessions are organised as planned by the AWWs - trained as well as untrained.

Time devoted for the NHED sessions also appears to be satisfactory due to the fact that more than half of the mothers reported the duration of the last session to be more than 45 minutes.

As regards the issues discussed, food & nutrition and immunisation emerged as the major issues. Growth monitoring, breast feeding, ante natal and post natal care services and family planning were the other issues discussed. Here again, growth monitoring appears to have not received much importance (only 11-19 per cent of the mothers reported about it). Proportion of mothers reporting discussion about issues like food and nutrition and growth monitoring was significantly higher among the mothers from the centres with trained AWWs.

Use of aids - mostly charts followed by posters and immunisation card - was reported by more than half of the mothers. (Table 11.2d).



Table 11.2c NHED Sessions by AWWs

(% Mothers)

	Centres with	
	Trained AWW	Untrained AWW
<u>Frequency</u>		
More than once a month	38	34
Once a month	38	49
Once in two months	18	13
Less often	6	5
<u>Last session held</u>		
1-4 weeks ago	53	59
5-9 weeks ago	20	19
10+ weeks ago	21	12
Can't say	7	10
<u>Time spent - Last session (minutes)</u>		
Upto 15	5	5
16-30	20	19
31-45	4	2
46+	62	63
Can't say	10	10
<u>Issues discussed</u> <input type="checkbox"/>		
Food & Nutrition	81	74 (z = 3.80)*
Immunisation	62	65
Growth monitoring	19	11 (z = 4.99)*
Breast feeding	15	12
AN & PN services	18	21
FP	17	19
Hygiene/Sanitation	8	10
IGA	6	6
Referral services	9	6
Total No. of mothers with < 6 yrs child reporting NHED sessions by AWW	282	226

☐ Total exceeds 100 due to multiple response

\* Significant at 5% level of significance

Table 11.2d Use of Aids (Mother's response)

(% mothers)

	Centres with	
	Trained AWW	Untrained AWW
<u>Whether used AV aids</u>		
Yes	61	62
No	37	33
Can't say	2	5
Total No. of mothers reporting NHED Sessions by AWW	282	226
<u>Type of aids used</u> <input type="checkbox"/>		
Poster	36	37
Charts	80	81
Immunisation card	24	37
Total No. of mothers reporting use of AV aids by AWW	171	139

☐ Total exceeds 100 due to multiple response

**11.3 INFANT AND CHILD DEATHS**

On being asked about the post ICDS changes in the area, senior functionaries of ICDS mentioned about reduction in infant and child deaths. Data relating to infant and child deaths during 1996 and 1997 was collected from the senior officials. Analysis of this data is presented in Table 11.3a.

Table 11.3a Reduction in Infant and Child Deaths (1996-1997)

Extent of reduction	(% Functionaries)	
	Infant deaths	Child deaths
< 25%	13	9
25 - 49%	27	22
50 - 74%	35	48
75 - 99%	25	21
Total No. of Functionaries	99	

About one fifth to one fourth of the functionaries reported more than 75 per cent reduction in child deaths and infant deaths. More than half (60 to 69 per cent) of the functionaries reported that the infant and child deaths have reduced by more than 50 per cent during 1996 - 1997. This illustrates the impact of ICDS on infant and child deaths in the study area.



## 11.4 RECORDING WORK

Maintenance of different registers is another job responsibility of the AWWs. The AWWs need to maintain 17 registers. Attempts were made in the study to find out the extent of awareness of the different registers among the AWWs, availability of the registers and frequency of updating.

### Awareness

To begin with, all the AWWs were asked to list out the different registers they are supposed to maintain. These responses were considered to get the level of spontaneous awareness. Then for each of the registers not mentioned by the AWW, the interviewer asked the AWW whether she is aware of the register. This information gives us the aided awareness of the register. Table 11.4a gives the levels of spontaneous and aided awareness of the different registers among the AWWs.

Spontaneous awareness levels were high for most of the registers. And upon aiding, all the AWWs reported that they are aware of almost all the registers. Levels of spontaneous awareness about some of the registers like Survey, Growth Charts, Food Stock and Distribution etc. were noticed to be higher among the trained AWWs compared to the untrained AWWs.

Table 11.4a Awareness about registers

(% AWWs)

Register	Trained		Untrained	
	Spontaneous	Aided	Spontaneous	Aided
Survey	74	26	71	29
Growth Chart	62	38	56	44
Benef. Attendance	90	10	91	9
Food stock/distribution	67	31	60	36
Reg. of beneficiaries	62	37	60	39
Immunisation	70	28	67	31
Staff attendance	82	18	84	16
Medicine stock	48	51	46	52
Health inspection	50	49	50	48
Reg. of birth	68	31	68	31
Reg. of pregnant women	67	33	66	33
Mothers sessions	61	38	56	43
Nutrition food camp	38	54	31	56
Reg. of deaths	75	25	72	27
Referral services	69	31	64	35
Advisory committee	23	33	18	31
Permanent stock register	36	54	31	54
Total No. of AWWs	1485		1180	

Note : Total exceeds 100 due to multiple response

### Maintenance

All the AWWs were asked about the registers they were actually maintaining at the time of the survey. The presence of the register was physically verified by the field teams at each AWC. Analysis of this data is presented in Table 11.4b.

Most of the registers were maintained by almost all the AWWs. Survey register, Beneficiary attendance, Food stock & distribution, Immunisation, Staff attendance and Registration of births were some of the registers maintained by 97 to 98 per cent of the trained AWWs.

Proportion of AWWs maintaining each of the registers was higher among the trained AWWs, compared to their counterparts who could not receive the refresher training. And in most of the cases, the difference was found to be statistically significant at 5% level of significance.

Table 11.4b Maintenance of Registers

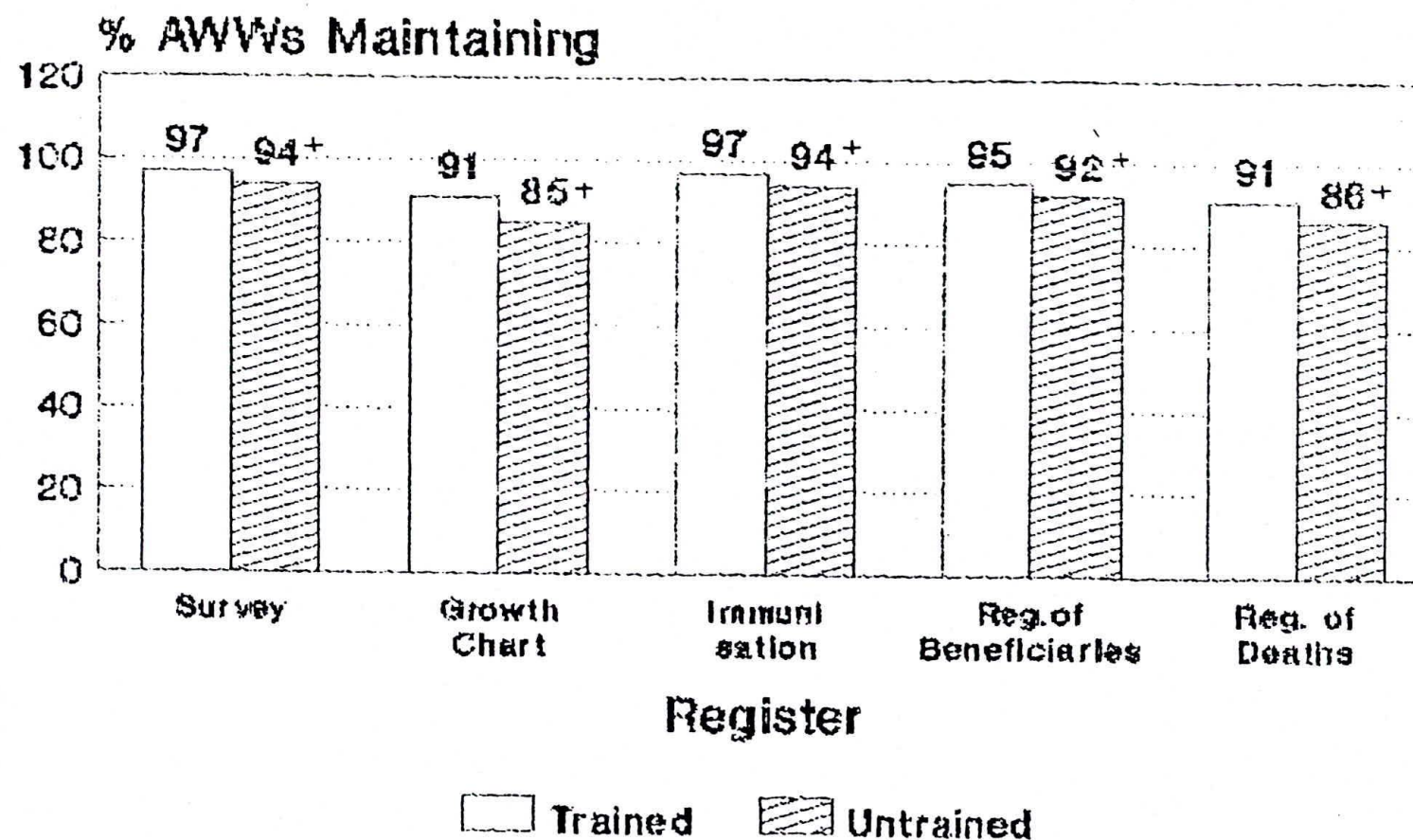
Register	(% AWWs)	
	Trained	Untrained
Survey	97	94 ( $z = 7.90$ )*
Growth chart	91	85 ( $z = 7.93$ )*
Benef. Attendance	98	97
Food stock and distribution	97	93 ( $z = 9.47$ )*
Reg. of beneficiaries	95	92 ( $z = 6.07$ )*
Immunisation	97	94 ( $z = 7.11$ )*
Staff attendance	98	97
Medicine stock	89	85 ( $z = 6.14$ )*
Health inspection	90	83 ( $z = 10.41$ )*
Reg. of births	97	94 ( $z = 7.10$ )*
Reg. of Pregnant women	95	91 ( $z = 32.37$ )*
Mother sessions	90	85 ( $z = 7.94$ )*
Nutrition food camp	85	80 ( $z = 6.87$ )*
Reg. of deaths	91	86 ( $z = 7.94$ )*
Referral services	90	88
Advisory committee	84	79
Permanent stock reg.	86	79
Total No. of AWWs	1485	1180

\* Significant at 5% level of significance

Note : Total exceeds 100 due to multiple response



# Fig.11.5 Registers Maintained by AWWs



+ Significant at 5% level of significance

On the basis of the results discussed above, it can be concluded that the trained AWWs were able to perform the task of maintenance of the registers in a better way. On being asked about the benefits derived from the refresher training, AWWs, Supervisors, CIDPOs, and AWTC staff invariably reported about the improvement in skill of the AWWs relating to the recording work. The trained AWWs were able to rectify their mistakes in the recording work, became confident about their ability to maintain the registers and were making efforts to do the recording work properly (with enhanced interest).

The difference between the trained and untrained AWWs was visible in terms of their response regarding the perceived problems and suggestions for improvement in the context of the recording work. For instance, 21% of the untrained AWWs reported lack of knowledge/understanding as a problem against 10% of the trained AWWs. Heavy workload was mentioned more often by the trained AWWs (31%). Problems relating to supply of new printed registers was cited by about one fifth of the trained as well as the untrained AWWs.

Some of the suggestions put forth by the AWWs to ensure regular updating of the registers include :

- Reducing the number of registers to be maintained (33% trained and 29% untrained AWWs)
- Training / guidance / inputs regarding maintenance of the registers (22% trained and 35% untrained AWWs)
- Regular supply of new printed registers (22% trained and 19% untrained AWWs)

Some of the registers contain similar kind of information and the workload can be reduced by decreasing the number of registers to be maintained by the AWWs. Similar exercise was carried out by MODE for the World Bank assisted ICDS Project in Andhra Pradesh under the OR Study. As a result of the OR exercise, the number of registers to be maintained in the project area got reduced from 23 to 6. And this was found to be yielding encouraging results in regular maintenance of the registers by the AWWs. Perhaps this kind of exercise can be taken up in Karnataka also to improve the situation further through reduction in the workload and providing more guidance.

Short term training (say for 2-3 days) can be organised at the sector / block level on the new set of the revised registers to make the AWWs competent to do their recording work properly. Or alternatively, the Supervisor can give the necessary inputs during the sector meeting to the needy AWWs regarding the recording work.



## **11.5 SUPERVISION**

Effective supervision is a crucial input for improving the performance of the grassroot level workers. Supervision is considered as a way to provide guidance and support to the needy and deficient AWWs.

All the AWWs were asked about the frequency of the supervisor's visit, time spent and activities carried out by the supervisor. The results are presented in Table 11.5a.

About 65 per cent of the AWCs are usually visited by the Supervisor every month (as envisaged in the project documents). Supervisors usually visit about 13-15 per cent of the centres in their area once in 4-6 months only. The responses relating to the general practice as well as the last visit indicate less frequent supervisory visits. This was mainly due to vacancy of the supervisor posts resulting in one supervisor taking care of even 2 to 3 sectors. This makes it almost impossible for the Supervisor to visit each centre of her sector every month. Poor transportation and heavy workload also add to the problem.

About half of the AWWs - 45% trained and 59% untrained reported that their supervisor spent about 1 hour at their centre during the last visit. Checking of the registers and food stock, and observing the pre school session were the major activities carried out by the supervisor. The Supervisors who spend more time at the centre could carry out other activities like clearing doubts, house visits and attending meetings.

All the Supervisors interviewed in the study were also asked about their visits to the AW centres of their sector. About one third of the Supervisors reported that they usually visit each centre every month. Less than one fifth (17 per cent) of the Supervisors reported that they visit each of the centres in their area once in 4-6 months. The stated response of the Supervisors were in line with that of the AWWs. Reasons cited for less frequent visits to the AW centres include heavy workload due to additional sectors and lack of transport facilities.

By and large, the Supervisors visit upto 3 centres in a day (79%) with about one fifth of the Supervisors visiting 4-6 centres in a day.



The activities carried out by the Supervisors during their visit to AWC include :

- Checking of the registers (86%)
- Checking the food stock (69%)
- Observing the pre school sessions (62%)

Rest of the activities like meeting community leaders / mothers and attending meetings were mentioned by less than one third of the supervisors.

Table 11.5a Visits by Supervisor (AWW's Response)

	(% AWWs)	
	Trained	Untrained
<u>Frequency</u>		
Every month	66	65
Once in 2-3 months	19	22
Once in 4-6 months/rarely	15	13
<u>Last visit</u>		
Upto 1 month ago	59	58
2-3 months ago	24	26
4+ months ago	16	16
<u>Time spent</u>		
< 1hr	18	27
1 hr	27	30
2-3 hrs	38	32
4-6 hrs	12	7
No response	4	4
<u>Activities</u> <sup>□</sup>		
Checked registers	90	91
Observed pre school	66	62
Checked food stock	64	64
Cleared doubts	35	36
House visits	15	12
Attended meetings	11	9
Total No. of AWWs	1485	1180

□ Total exceeds 100 due to multiple response

### To sum up

Almost all the AWWs were providing Nutrition and Health Education through house visits as well as group sessions. AWWs who received the innovative refresher training were able to provide NHED through regular house visits and group sessions. Performance of the trained AWWs was better in terms of use of audio visual aids and frequency of organising NHED sessions. Above findings were corroborated by the participant observation of the AWCs carried out during the field work.

As regards the recording work, AWWs who received the refresher training were able to perform well while the AWWs who did not receive the refresher training were not able to do so mainly due to lack of knowledge / understanding. However, there is a need to have a relook at the various registers maintained by the AWW so as to reduce her workload.

Supervision needs to be improved and made effective by filling up the vacant supervisor posts or assigning the responsibility of supervision to senior functionaries / officials of the Department of Women and Child Development or AWTC.

## **CHAPTER 12**

### **CONCLUSIONS AND SUGGESTIONS**



## 12.1 CONCLUSIONS

On the basis of the findings presented in the earlier sections, the following conclusions can be made about the impact of the innovative refresher training imparted to the AWWs during 1994 - 1997 :

- \* Health and nutrition status of the children below 6 years of age was better among the children from the centres with trained AWWs. The study brings out higher levels of immunisation coverage (especially in case of Measles and Vitamin A drops) and lower levels of malnutrition (grade III & IV) among the children from the centres with trained AWWs. Effective referral services, regular weighing of the children and better post weighing interaction between the AWW and mothers regarding the kind of care to be taken and food to be given were also observed in the centres with trained AWWs.
- \* Schooling status of the children of 6-14 years of age was better in the villages with trained AWWs. Increase in primary school enrollment was reported by the mothers and community leaders more often in these villages. The performance of the trained AWWs in terms of organising regular pre school sessions, use of integrated approach and pre school aids so as to make the sessions more interesting and useful was observed to be better.
- \* Levels of knowledge and awareness about the health and child care practices were significantly higher among the mothers from the centres with trained AWWs. Specifically, extent of awareness as well as utilisation of services like child immunisation (Measles and Vitamin A drops), TT (Pregnant Women), Health Checkups (Pregnant Women), Referral Services (Children), Supplementary Food and Growth Monitoring was observed to be significantly higher among the mothers from the centres with trained AWWs. Efforts from the trained AWWs to create more awareness among the mothers through regular house visits and NHED sessions could have paved the way for the improvement in the knowledge and awareness of the mothers.

- \* The AWWs (trained as well as untrained) participate actively in the activities of other departments providing the supportive services like Literacy, Health, Education, DWCR, MSY etc.

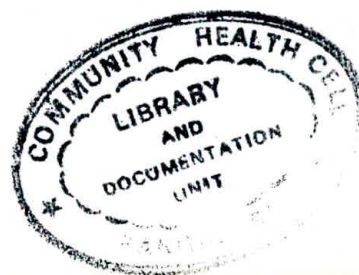
The AWWs were able to get the cooperation of other departments like Health (immunisation, health checkups, referrals), Education (AWC building) and Panchayat / BDO (building, fuel expenses). The coordination between the ICDS and other departments was noticed to be of higher order.

- \* The trained AWWs provided better picture in terms of community participation. The extent of involvement of community leaders, mothers and mahila mandal members in AWC activities was significantly higher in the centres with trained AWWs. Improvement in convincing ability as well as communication skill and enhanced interest to perform better could be considered as the factors responsible for higher levels of community participation in the centres with trained AWWs.

- \* The trained AWWs were able to perform better in providing the basic services regularly, properly efficiently and effectively (eg. Immunisation coverage, Use of integrated approach for pre school, Periodic weighing, Pre school, Preparation of pre school aids, NHED, Recording work etc.).

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### Impact of ICDS

- \* ICDS has helped in improving the health and nutrition status of the children below 6 years of age with better child care practices (eg. immunisation) and lower levels of malnutrition
- \* The study highlights the better schooling status of the children of 6-14 years in the study area.
- \* ICDS has contributed to better knowledge and awareness about health and child care practices (eg. Immunisation, supplementary feeding, growth monitoring etc.) among the mothers of 0-6 years child. This was achieved through regular and effective NHED programmes carried out by the AWWs.
- \* The study highlights greater community participation as well as convergence of services which again can be considered as a contribution of the ICDS programme.



## 12.2 SUGGESTIONS

Suggestions for further improvement in the innovative refresher training programme are as follows :

- \* More time be allocated for group discussions during the training
- \* More use of audio visual aids for imparting the training
- \* Reduction of the batch size of trainees (AWWs) to 10-15 so as to make the interaction more effective.
- \* Supply of all the materials during/after the training to the AWWs.
- \* Greater attention towards follow up after the training (by the trainers) to assess the post training changes.

Suggestions for further improvement in the ICDS programme or service delivery are :

- \* Make the recruitment policy completely free from political interference to ensure selection of the needy, dedicated and local women.
- \* Filling up all vacant posts - eg. Supervisor, MO.
- \* Reduction in the number of registers to be maintained.
- \* Regular supply of printed registers.
- \* Regular review meetings of functionaries of ICDS and other departments at district/block level.
- \* Joint supervision / joint visits by the officials of ICDS and other departments (to the AWCs).
- \* Provision of vehicle to the officials of other departments for joint visits (eg to the MO for attending sector or project meetings).
- \* Responsibility of supervision can be given to the AWTC staff or other senior functionaries of ICDS to ensure effective supervision.
- \* Follow up of the immunisation dropouts to ensure completion of the full schedule (eg. all doses of OPV, DPT and Vitamin A).

- \* Timely food supply (preferably through single supplying agency) to avoid interruption and ensure feeding for all the 25 days in a month.
- \* More priority be given to growth monitoring in the NHED (through group sessions as well as house visits) so as to sensitise the mothers about regular periodic weighing of the children.
- \* Timely supply of the weighing scales to the AW Centres.
- \* More emphasis to involve the local (trained) dais in conducting deliveries.
- \* Sensitisation of the community leaders and mothers about ICDS, its importance and usefulness for the village (through sector and village level sessions).