Original article

Study of profile, knowledge and problems of anganwadi workers in ICDS blocks: a cross sectional study

1 Patil SB *, 2 Doibale MK

1Dept. of community medicine, Chirayu Medical College, Bhopal, MP , India.
2Dept. of Community Medicine , Dr. S.C. Govt. Medical College, Nanded , Maharashtra , India

*Correspondence: Email: spsandeepbhau@gmail.com

ABSTRACT

Introduction: The present study was planned to study the profile of Anganwadi Workers (AWWs) and to assess knowledge of AWWs & problems faced by them while working.

Methods: Anganwadi centres were selected by stratified sampling technique. From each block 10% AWWs were enrolled into study. The functioning of AWWs was assessed by interviewing Anganwadi workers for their literacy status, years of experience, their knowledge about the services rendered by them and problems faced by them.

Result: Most of AWWs were from the age group of between 41-50 years; more than half of them were matriculate and 34(69.38%) workers had an experience of more than 10 yrs. Majority (81.63 %) of AWWs had a knowledge assessment score of above 50%. They had best knowledge about nutrition and health education (70%).87.7% of the workers complained of inadequate honorarium, 28.5% complained of lack of help from community and other problems reported were infrastructure related supply, excessive work overload and record maintenance.

Conclusions: Majority of AWWs were beyond 40 years of age, matriculate, experienced, having more than 50% of knowledge related to their job. Complaints mentioned by them were chiefly honorarium related and excessive workload.

Keywords: Anganwadi workers, profile, knowledge, problems.

INTRODUCTION

Children’s Development is as important as the development of material resources. ICDS Scheme is the most comprehensive scheme of the Government of India for early childhood care and development. It aims at enhancing survival and development of children from the vulnerable sections of the society. Being the world’s largest outreach programme targeting infants and children below six years of age, expectant and nursing mothers, ICDS has generated interest worldwide amongst academicians, planners, policy makers, administrators and those responsible for implementation. Consequently, a large number of research studies have been conducted to evaluate and assess the impact of the programme. But it can be seen that most of the studies have provided only piecemeal information. These studies also have not provided ample evidence on interdependence of various variables related to implementation of programme. The Anganwadi worker (AWW) is the community based voluntary frontline worker of the ICDS programme selected from the community, she assumes a pivotal role due to her close and continuous contact with the beneficiaries. 

The output
of the ICDS scheme is to a great extent dependant on
the profile of the key functionary i.e. the AWW, her
qualification, experience, skills, attitude, training etc.
AWW has to conduct various different types of job
responsibilities. Not only she has to reach to variety
of beneficiary groups but she has to provide them
with different services. Taking into consideration all
above factors this study was conducted in ICDS
Blocks of Aurangabad district.

MATERIAL AND METHOD
The present study was carried out at two Integrated
Childhood Development Services Scheme (ICDS)
blocks from Aurangabad district. The study was
conducted from Jan.2012 to Dec.2012. It was a
descriptive cross sectional type of study.

Sample: Multistage sampling was the method used
for sampling. Initially two projects were selected by
simple random method from a list of ICDS blocks of
our district. Then from each project, 10% anganwadi
centers were selected using a stratified random
sampling method. All the anganwadi centers (AWCs)
in each bit of the project were enlisted. 10%
anganwadis from each bit were selected randomly
using lottery method. Thus total 49 anganwadis were
selected for the study. Enlisting of AWCs and then
random selection were done in the meetings held
with the supervisors in presence of child development
project officers. The working time of AWCs is from
10am-1pm daily except in summer when the timing
is 9am-12 noon. The anganwadi centers were visited
by the investigator during this time period. AWCs
where workers are not available at first visit due to
any reason were revisited.
The functioning of AWC was assessed by
interviewing anganwadi workers for their literacy
status, years of experience, their knowledge about the
services rendered by them and problems faced by
them. Adequacy and frequency of different services
was also assessed. Functioning of AWCs was also
assessed by means of records, reports, the
infrastructure, & logistics available at the center.
For anganwadi worker’s knowledge assessment, a
scoring system was developed. The knowledge
assessment score from each AWW was calculated
based on the responses to a questionnaire containing
20 questions. The questionnaire was so designed as to
contain questions on every aspect of services
provided through the anganwadi center. It included
questions on different aspects of functioning of
AWWs like immunization, prophylaxis against
blindness & anemia, nutrition & health education,
supplementary nutrition, growth monitoring &
referral services. One mark was given for a correct
response, while no mark was given for a wrong
response or unanswered question. The knowledge of
each AWW was scored out of 20. Workers with score
of less than 10 were categorized as having inadequate
knowledge, while those with score of 10 and above
were labeled as having adequate knowledge.

RESULTS
Maximum number of workers, 17(34.69%) were in
the age group of 41-50 yrs, 14(28.57%) in the age
group of 31-40 years. Lowest number i.e., 6 (12.2%)
belonged to the age group of 20-30 yrs. Almost
32(65.3%) of AWWs were matriculate. Only 4%
AWWs were post-graduate. Majority 34 (69.38%) of
AWWs had an experience of more than 10 yrs. It was
observed that among the different services provided
by AWWs, they had the best knowledge about the
component of nutrition and health education (70%)
while least about supplementary nutrition (31.9%)
(Table 1). 81.63 % of AWWs had a knowledge
assessment score of above 50% as per the
questionnaire provided.
Knowledge assessment score went on increasing as the experience in years was increasing. But the difference was found statistically significant (p < 0.05) (Table 2). No relationship was found between the educational qualification of the worker and her knowledge about different services provided by her (p>D.05) (Table 3).

As is evident from the data, 43(87.7%) workers complained of inadequate honorarium. While only 14(28.5%) complained of lack of help from community. Other problems complained by 21(42.8%) workers were infrastructure related due to inadequate space for displaying NFPSE posters or other posters related to nutrition and health education, space is not available for conducting recreational activities like outdoor activities, nuisance by animals entering into AWC. Logistic supply related problems were complained by 23(46.9%). Work overload complained by 30(61.2%) as their work involves daily home visits, a lot of record maintenance or they have to assist for other health programmes apart from their Anganwadi related work like in pulse polio programme, vitamin A distribution programme conducted by Municipal Corporation .The community participation or help from the community was always made available as and when required. Sometimes people help in food distribution if worker was busy with some other activities of AWC etc. Very few AWWs mentioned problem regarding inadequate supervision and other problems (Table 4).

**DISCUSSION**

Integrated Child Development Services (ICDS) scheme is the largest programme for promotion of maternal and child health and nutrition not only in India, but in the whole world. Maximum no. of workers 17(34.69%) were in the age group of 41-50 yrs. Gupta et al in their study at the ICDS block worked out the average age of AWWs to be 23.7yrs. Programme Evaluation Officer (PEO) Study on the Integrated child development services project found that 2% of the Anganwadi workers belonged to the age group 18-25 years. Khan et al reported that 50% of AWWs were more than 35 years of age. Seema et al in the critical assessment of AWCs observed that 32% of AWWs were below 30 yrs age. Three decades of ICDS, a comprehensive assessment of the programme at national level undertaken by National Institute of Public co-operation and Child Development (NIPCCD) made an observation that 30% of AWWs were in age group of 25-35 years. In our study, 32(65.3%) of AWWs were matriculate which is consistent with many other studies. Vasundhara et al in their project observed that 96.16% of AWWs had education up to the high school level and 2 were graduates. World Food Programme, India, a pilot Project Funded by USA ill observed wide variations in respect of educational level of Anganwadi workers. While 25% were educated below Standard V. 5% were graduates; the modal educational level being Standard VIII. Kapil et al in their study mentioned that 88% of AWWs had completed primary school. Maximum no. of workers 34(69.38%) had an experience of more than 10 years. Researchers have reported that 70% of AWWs had worked in the ICDS area for 10 years.

As per the findings of our study, AWWs have best knowledge about the component of nutrition and health education (70%) while least about supplementary nutrition (31.9%). Bhasin et al reported that 99% had adequate knowledge about the significance of the growth charts that indicate different grades of nutritional status, 90-91 % had correct knowledge about weight of a child at 1 and 3
years, 17-30% knew the correct mid-upper arm circumference (MUAC) for an optimally nourished child aged 2 and 4 years. Chattopadhyay\textsuperscript{12} found that only 11.8% Anganwadi workers could define fever. More than 90% workers correctly knew about the stages related to vitamin A deficiency and dosage schedule for children; 59% knew the total number of IFA (Iron, Folic Acid) tablets to be given to a pregnant mother.

As per the findings of our study, 81.63% of AWWs have a knowledge assessment score of above 50% as per the questionnaire provided. Gopaldas et al\textsuperscript{13} observed from their study that 87% of the ICDS functionaries could interpret growth charts. In our study the problems felt by AWWs were mainly inadequate honorarium (87.7%) and excessive record maintenance. Problems mentioned in other studies are also mainly related to inadequate honorarium and infrastructure.\textsuperscript{14}

**CONCLUSION**

Most of the AWWs in ICDS Blocks were from age group 41-50 yrs, matriculate, experienced, having knowledge of more than 50% in their daily functions at AWCs. The knowledge increases with experience as an AWW, but has no relation with their educational qualification. Problems felt by them were mainly due to inadequate honorarium and excess work load. So, timely increments in honorarium should be considered.

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Total no. of questions asked</th>
<th>Total no. of correct responses</th>
<th>Percent knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization</td>
<td>196 (49 x 4)</td>
<td>125</td>
<td>63.7</td>
</tr>
<tr>
<td>Nutrition and health education</td>
<td>294 (49 x 6)</td>
<td>205</td>
<td>70</td>
</tr>
<tr>
<td>Supplementary nutrition</td>
<td>147 (49 x 3)</td>
<td>47</td>
<td>31.9</td>
</tr>
<tr>
<td>Growth monitoring</td>
<td>245 (49 x 5)</td>
<td>118</td>
<td>48.1</td>
</tr>
<tr>
<td>Referral services</td>
<td>98 (49 x 2)</td>
<td>65</td>
<td>66.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>976</strong></td>
<td><strong>558</strong></td>
<td><strong>57.17</strong></td>
</tr>
</tbody>
</table>

Figures in parenthesis indicate percentages. N =49
Table no. 2- Anganwadi worker’s knowledge assessment score related to her experience

<table>
<thead>
<tr>
<th>Experience in years</th>
<th>No. of AWWs with score &lt; 10</th>
<th>No of AWWS with score ≥ 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5yrs</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>&gt; 10 yrs</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Figures in parenthesis indicate percentages. N= 49    \( \chi^2 = 14.2 \)    D.F. = 2    \( p < 0.01 \)

Table no.3- Anganwadi worker’s knowledge assessment score related to her education

<table>
<thead>
<tr>
<th>Education</th>
<th>No. of AWWs with score &lt; 10</th>
<th>No of AWWS with score ≥ 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Intermediate</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Graduate</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Post- graduate</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Figures in parenthesis indicate percentages. N= 4    \( \chi^2 = 1.12 \)    D.F. = 3    \( p > 0.05 \)
Table no.4 - Problems faced by Anganwadi workers

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Type of problem</th>
<th>No of AWWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inadequate honorarium</td>
<td>43 (87.7)</td>
</tr>
<tr>
<td>2.</td>
<td>Infrastructure related</td>
<td>21 (42.8)</td>
</tr>
<tr>
<td>3.</td>
<td>Logistic supply related</td>
<td>23 (46.9)</td>
</tr>
<tr>
<td>4.</td>
<td>Work overload</td>
<td>30 (61.2)</td>
</tr>
<tr>
<td>5.</td>
<td>Excessive record maintenance</td>
<td>37 (75.5)</td>
</tr>
<tr>
<td>6.</td>
<td>Lack of help from community</td>
<td>14 (28.5)</td>
</tr>
<tr>
<td>7.</td>
<td>Inadequate supervision</td>
<td>14 (28.5)</td>
</tr>
<tr>
<td>8.</td>
<td>Others</td>
<td>16 (32.6)</td>
</tr>
</tbody>
</table>

Figures in parenthesis indicate percentages

REFERENCES
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