

## ORIGINAL ARTICLE

# A Study of Knowledge of Anganwadi Workers about Common Mental Health Problems in Beneficiaries of the Integrated Child Development Services Scheme in Amritsar, Punjab, India

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## ABSTRACT

**Introduction:** Integrated child development services (ICDS) scheme has a focus on the physical health of the beneficiaries, though ideally, all the dimensions of health, be it physical, mental, social, emotional, spiritual should be equally addressed. Mental health problems abound, and their timely diagnosis and treatment can drastically cut down the morbidity associated with them. Anganwadi workers (AWWs) can prove to be an asset in this timely diagnosis. However, not much is known about the adequacy of knowledge and level of training of AWWs to recognize the commonly prevalent mental health problems in their wards.

**Materials and methods:** The present study was a cross-sectional study conducted from April to June 2014 on 1405 AWWs working in district Amritsar to know about their comprehension of mental health problems. A semi-structured pre-tested performance was used for the purpose. The data so collected were analyzed using SPSS (version 21.0) software. Percentages and chi-squared values were calculated.

**Results:** Majority of the AWWs, i.e, 605 (43.0%) were in the age group of 30 to 39 years, 1124 (80.0%) were educated to matriculation, and above, 723(51.5%) had been serving for 10-20 years. More than half 823 (58.6%) were conversant with mental health problems. Depression was the most commonly cited mental health problem 1342 (95.5%) followed by mental retardation 1293 (92.0%) and antisocial behavior 1185 (84.3%).

**Conclusion:** A strong association between cognition of mental health problems and literacy status of the AWWs ( $\chi^2 = 137.48$ ,  $p < 0.05$ ), duration of service ( $\chi^2 = 28.18$ ,  $p < 0.05$ ) and participation in in-service training for the up-gradation of their knowledge ( $\chi^2 = 47.15$ ,  $p < 0.05$ ) was found.

**Keywords:** Anganwadi workers (AWWs), ICDS, Mental health problems.

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## INTRODUCTION

Children are the future of a nation, and a healthy nation can only be borne by healthy mothers. Any investment in their health and wellbeing is a preemptive investment in the health of the nation. India is home to 158 million children in the age group of 0 to 6 years.<sup>1</sup> There are many programs targeted at children which are committed to improving their health status be it immunization services, supplementary nutrition, school health programs. ICDS scheme is one of the finest outreach programs launched by the Government of India. It represents the country's commitment to the wellbeing of the most vulnerable section of the population. As on 31st March 2015, 7072 projects and 13,46,186 Asian Waterbird Census (AWCs) are operational across 36 States/Union Territories (UTs) covering 1,365.44 lakh 3 to 6 years children under pre-school component.<sup>2</sup>

Anganwadi workers are community-based voluntary frontline workers who are the main life force of ICDS. While the resources for the running of the AWCs are provided by the central government in 60:40 split with the state government, the spot services are provided by these workers.<sup>3</sup> Of the spectrum of services offered by an AWC, health checkup offers one of the most direct evidence of the quality of health services being provided. Physical health assessment parameters are fairly simple, easy to perform and measurable. On the other hand, mental health is probably the most ignored of all dimensions of health. At least 6.5% of the Indian population had some

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form of the serious mental disorder, with no discernible rural-urban difference.<sup>4</sup> No reliable figures are known for age-specific and mental health problem specific categories. Mental health disorders include a spectrum of conditions with episodes, illnesses, and disorders that are often disabling in nature, vary in their severity (from mild to severe) and duration (from months to years) and often exhibit a chronic course that has a relapsing and recurring trajectory over time.<sup>5</sup>

Mental health disorders include a spectrum of conditions with episodes, illnesses, and disorders that are often disabling in nature, vary in their severity (from mild to severe) and duration (from months to years) and often exhibit a chronic course that has a relapsing and recurring trajectory over time.<sup>6</sup>

Depression is one of the two diagnostic categories that constitute common mental disorders (CMDs), the other being anxiety disorder. Both are highly prevalent across the population (hence they are considered “common”) and impact on the mood or feelings of affected persons.

Mental health problems do not lend themselves to easy diagnosis and mental health assessment is also more difficult. Problems diagnosed well in time and timely referrals from the AWC will go a long way in alleviating the burden of the mental health problems which might emerge later in life.

## MATERIALS AND METHODS

This cross-sectional study was carried out on 1405 anganwadi workers out of 1680 AWWs (as per the lists provided by Block Development Officers) working in various anganwadis of district Amritsar from April to June 2014. A semi-structured pre-tested Performa was used for the purpose. All the participants were told about the purpose of the study, confidentiality of the information was assured and consent was taken for conduction of the study. Knowledge about any three common mental health problems was considered as a good proxy indicator of knowledge about mental health and its problems. The data were analyzed using SPSS software (version 21.0). Percentages and chi-squared values were calculated. The significance level was set at  $p < 0.05$ .

## RESULTS

Of the 1405 AWW interviewed, 605 (43.0%) were in the age group of 30 to 39 years, 568 (40.4%) were in the age group of 20 to 29 years while only 58 (04.2%) were over the age of 50 years. As far as the literacy status of the workers was concerned, 1124 (80.0%) were matriculating and above while only 281 (20.0%) were less than matriculate. Majority of the workers, i.e., 723 (51.5%) had a service duration of 10 to 20 years whereas 133

(09.4%) had been working for more than 20 years in Anganwadi (Table 1).

The anganwadis were located both in urban and rural areas in the present study, 514 (36.5%) of the anganwadis were urban while 891 (63.4%) were located in rural areas. More than half of the AWWs, i.e., 842 (59.9%) had attended in-service training to refresh their knowledge.

For the study, knowledge about any three common mental health problems was considered as a good proxy indicator of knowledge about mental health and its problems. 823 (58.6%) of the AWWs were having a good knowledge of mental health problems. Depression was identified by most of the AWWs, i.e., 1342 (95.5%) followed closely by mental retardation 1293 (92.0%). Antisocial behavior was listed by 1185 (84.3%) of the AWWs while only few 347 (24.7%) mentioned autism as a mental health problem (Table 2).

**Table 1:** Distribution of the AWWs according to sociodemographic parameters

<i>Sociodemographic parameter (N = 1405)</i>	
<i>Age (in years)</i>	
20–29	568 (40.4%)
30–39	605 (43.0%)
40–49	174 (12.4%)
50–59	58 (04.2%)
<i>Literacy</i>	
Non-matriculate	281 (20.0%)
Matriculate and above	1124 (80.0%)
<i>Duration of service</i>	
<10 years	549 (39.1%)
10–20 years	723 (51.5%)
> 20 years	133 (09.4%)
<i>Location of AWC</i>	
Urban	514 (36.5%)
Rural	891 (63.4%)
<i>Attended in-service training</i>	
Yes	842 (59.9%)
No	563 (40.1%)
<i>Could correctly name and describe any three common mental health problems</i>	
Yes	823 (58.6%)
No	582 (41.3%)
<i>Common mental health problems described</i>	
Depression	1342 (95.5%)
Autism	347 (24.7%)
Attention deficit disorder/ hyperactivity	586 (41.7%)
Mental retardation	1293 (92.0%)
Antisocial behavior	1185 (84.3%)
Condition arising due to hearing and speech impediment	823 (58.6%)
<i>Knew correct referral center for specific mental health problems</i>	
Yes	672 (47.8%)
No	733 (52.2%)

Less than half, i.e., 672 (47.8%) of the AWWs could correctly identify the right referral centers for specific mental health problems.

Having a working knowledge about mental health problems is pertinent to being able to suspect and help the beneficiaries attending the anganwadi centers. Of the 823 AWWs who were deemed to have a good grasp of the common mental health problems, 745 (90.5%) had better literacy status while knowledge of the same was limited to only 78 (9.5%) for AWWs who were nonmatriculated (Table 3). This knowledge gap in the two literacy categories was found significant at  $\chi^2 = 137.48$  and significance of  $p < 0.05$ .

Table 3 shows that there is a strong association between the duration of service and knowledge about health problems. Of the total 1405 participants enrolled, 823 (58.5%) had a good working knowledge about the mental health problems. Out of these 823 participants, 290 (35.2%) had been working as AWW for less than 10 years, and 471 (67.3%) had been working for 10 to 20 years. Only 32 (7.5%) of the participants had been working for more than 20 years. As the duration of service increased, the knowledge also increased at  $\chi^2$  value of 28.18 and significance of  $p < 0.05$ .

Table 4 shows the association between attendance of in-service training and good working knowledge about the mental health problems. Of the 823 participants who had a good working knowledge of mental health

problems, 556 (67.6%) had attended the in-service training to refresh their knowledge base. On the other hand, only 267 (32.4%) of the AWW who had not attended any training were conversant with the common mental health problems. This difference observed in the knowledge of workers who had undergone in-service training and those who had not was statistically significant at a  $\chi^2$  value of 47.15 and  $p < 0.05$ .

Table 5 shows the association between the location of the AWC whether urban or rural and cognizance about mental health problems. Three-hundred and sixteen (38.4%) of the AWW working in urban and 507 (61.6%) of the AWW working in rural areas had a good grasp over the subject of mental health problems. This knowledge gap between the workers from urban and rural areas was found to be statistically insignificant  $p = 0.09$ .

### DISCUSSION

The ICDS scheme was launched on 2nd October 1975 in 33 blocks in India and has expanded since. The services are given out through the main class of community worker called the AWW. Although the basic prerequisites to be an AWW remain the same, the socio-demographic profile of the Anganwadi workers varies in different parts of the country. In a study conducted in Aurangabad in two ICDS blocks, it was found that most of AWWs were from the age group of between 41 to 50 years; more than half of them were matriculated,

**Table 2:** Distribution of the AWWs according to literacy status and knowledge about mental health problems

<i>Literacy status</i>	<i>Good knowledge about mental health problems</i>	<i>Poor knowledge about mental health problems</i>	<i>Total</i>
Non matriculate	78 (27.8%) (9.5%)	203 (72.2%) (34.9%)	281 (100%) 1124 (100%)
Matriculate and above	745 (66.3%) (90.5%)	379 (33.7%) (65.1%)	1405 (100%) (100%)
	823 (58.5%) (100%)	582 (41.5%) (100%)	1405 (100%) (100%)
$\chi^2 = 137.48$	df = 1		p < 0.05

**Table 3:** Distribution of the AWWs according to the duration of service and knowledge about mental health problems

<i>Duration of service (in years)</i>	<i>Good knowledge about mental health</i>	<i>Poor knowledge about mental health</i>	<i>Total</i>
<10	290 (52.8%) (35.2%)	259 (47.2%) (44.5%)	549 (39.0%)
>20	471 (65.1%) (67.3%)	252 (34.9%) (43.3%)	723 (51.5%)
10–20	62 (46.7%) (07.5%)	71 (53.3%) (12.2%)	133 (9.5%)
$\chi^2 = 137.48$	823 (58.5%) (100%)	582 (41.5%) (100%)	1405 (100%) (100%)
$\chi^2 = 28.18$	df = 2		p < 0.05

**Table 4:** Distribution of the AWWs according to literacy status and knowledge about mental health problems

<i>Attended in-service training</i>	<i>Good knowledge about mental health</i>	<i>Poor knowledge about mental health</i>	<i>Total</i>
Yes	556 (66.0%) (67.6%)	286 (24%) (49.1%)	842 (100%) (59.9%)
No	267 (47.4%) (32.4)	296 (52.55) (50.9%)	563 (100%) (40.1%)
	823 (58.5%) (100%)	1405 (100%) (100%)	1405 (100%) (100%)
$\chi^2 = 47.15$	df=1		p < 0.05

**Table 5:** Distribution of the AWWs according to the location of anganwadi center and knowledge about mental health problems

<i>Location of AWC</i>	<i>Good knowledge about mental health</i>	<i>Poor knowledge about mental health</i>	<i>Total</i>
Urban	316 (61.5%) (38.4%)	198 (38.5%) (34.0%)	514 (100%) (36.6%)
Rural	507 (56.9%) (61.6%)	384 (43.1%) (66.0%)	891 (100%) (63.4%)
	823 (58.5%) (100%)	582 (41.5%) (100%)	1405 (100%) (100%)
$\chi^2 = 2.7$	df=1		p < 0.05

and 34 (69.38%) workers had an experience of more than 10 years.<sup>7</sup>

Another study conducted in Jammu found that 17.5% of the Anganwadi workers were under matric, 47.5% were matriculated, 27.5% had a secondary level and 7.5% up to graduation level. It was found that 25% of AWW were having a work experience of 0-10 years, while 65% of them had a work experience of 10-20 years and 10% of them had a work experience of 20-30 years. It was also found that majority (92.5%) of AWW were adequately trained and had also received in-service job training. Only 7.5% were untrained.<sup>8</sup>

In the present study, the most common age group was 30 to 39 years in 605 (43.0%), 1124 (80.0%) were educated up to at least matriculation and above, 723 (51.5%) had a work experience of 10 to 20 years and 842 (54.9%) had attended in-service training.

The Anganwadi worker is also obliged to detect disabilities. She has to enlist all such cases in a special register and refer them to the of the primary health center/sup-center. In the present study, although more than half of AWWs were familiar with the common mental health problems, yet less than half 672 (47.8%) were able to mention the correct referral place. In a qualitative study of AWC in Kashmir, the response rate was very poor as during the interviews Anganwadi workers reported that now it is certainly the responsibility of the accredited social health activist (ASHA)/auxiliary nurse midwife (ANM) and were not sure of their dominant role over ASHAa and ANMs.<sup>9</sup>

Anganwadi workers are envisaged as the sheet anchor of the ICDS scheme. Although the workload

they carry is considerable, it has been shown that with adequate training, they can be the first line of attack against common mental health problems afflicting the community.<sup>10</sup>

If they are given a short structured training in diagnosing common mental health problems in the community, it would go a long way in reducing the morbidity attached to the mental health. A study conducted in Gorakhpur concluded that with appropriate training, the AWWs were better able to screen the children who had mental health problems along with certain other disabilities and thus play an important role in prevention and control of incipient mental health problems.<sup>11</sup>

Also, research has proven that early diagnosis and intervention is done in the primary health care setting proves to be the most cost-effective in the long run.<sup>12</sup> It reduces the anxiety levels of the caregivers, improves acceptability and compliance and also prevents the tertiary care level health institutions from being deluged in cases which can best be treated at primary health care levels.<sup>13</sup>

Depression is the single most common mental health ailment afflicting 10% of pregnant women and 13% of women who have just given birth. This figure is higher in developing countries, i.e., 15.6% during pregnancy and 19.8% after childbirth.<sup>14</sup> In severe cases, mothers' suffering might be so severe that they may even commit suicide. In addition, the affected mothers cannot function properly. As a result, the children's growth and development may be negatively affected as well. Maternal mental disorders are treatable. Effective interventions can be delivered by well-trained non-specialist health providers. Anganwadi

workers can play a key role here as they are in regular contact with these women.

## CONCLUSION

Familiarity with the AWWs with the common mental health problems is crucial to their timely diagnosis and appropriate interventions. In the current study, little more than half 823 (58.5%) had good cognizance about mental health problems. This knowledge had a strong association with the literacy status of the AWWs, duration of service and participation in in-service training for the up-gradation of their knowledge. Regular reinforcement of training with an on-job capacity building, follow-ups rather than just Information education and communication (IEC) are recommended. On the ground, it has been proven in Thiruvananthapuram where comprehensive work up with teams involving grass root level workers who had undergone structured training was able to give tangible results.<sup>15</sup> These might actually transform the AWWs to the agents of change as envisioned in the community.

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