

Original Research Article

Health profile of Anganwadi sevikas working in rural Thane- a cross-sectional study

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ABSTRACT

Background: Anganwadi sevikas are the frontline workers of integrated child development services (ICDS) programme, providing a parcel of services to the children below six years of age, females in the reproductive age group, pregnant and lactating mothers. Promoting the health and welfare of this frontline force is critical to improve the delivery of services.

Methods: The present descriptive cross-sectional study was conducted in July, 2024 among 58 Anganwadi sevikas working in the catchment area of two rural health training centers of Rajiv Gandhi Medical College, Thane by using purposive sampling method. Socio-demographic profile and health status of the Anganwadi sevikas was recorded in pre-designed and pre-tested formatted proforma by interviewing them. The data was entered in Microsoft Excel and analysed. SE (p1-p2) test was applied. The statistical level of significance was fixed at $p < 0.05$.

Results: 58 Anganwadi sevikas were included in the study. 17(29.31%) subjects were in the age group of 18-40 years while 41 (70.69%) were in the age group of >40-58 years. The mean BMI of Anganwadi sevikas was 23.63 kg/m². 17 (29.31%) subjects were suffering from one or more non-communicable diseases while 41 (70.69%) did not have any health issues. Nobody was suffering communicable disease. 13 (22.41%) subjects were suffering from musculoskeletal disorders. 05 (8.62%) subjects had suffered from COVID-19.

Conclusions: Previous studies done on Anganwadi sevikas have focused primarily on the efficiency of service delivery. This study focused on their health and welfare issues. We observed, many Anganwadi sevikas were suffering from non-communicable diseases. This issue should be highlighted in the policy for them.

Keywords: Anganwadi sevikas, Health profile, ICDS, Rural area

INTRODUCTION

Anganwadi sevikas working under integrated child development scheme (ICDS) have time and again proven themselves to be an asset to health care development in rural areas of India. The Anganwadi is highly understudied and their distressed condition awaits proper address from policy makers.¹ An Anganwadi sevika, also known as Anganwadi worker is a frontline community worker who works at the grassroots level in our country. Her primary objective is to address the critical issues of maternal and child health as well as many other welfare activities in rural area. Typically 'Anganwadi' is a type of

mother and child care center. Each Anganwadi is run by an Anganwadi sevika supported by a helper in coordination with the existing health care delivery system in rural area.² These centers were started by the government of India as a part of the integrated child development services program to combat child hunger, malnutrition and other health issues of under five children. Children constitute principal assets of any country. Development of children is as important as the development of material resources. Integrated child development services scheme is the most comprehensive and one of the finest outreach programs of the Government of India, launched on 2nd October 1975 for

early childhood care and development. It aims at enhancing survival and development of children from the vulnerable sections of the society.³ This ICDS, the world's largest outreach programme targets infants and children below six years of age, women in the reproductive age group of 15 to 49 years, expectant and nursing mothers. ICDS has generated interest worldwide amongst academicians, planners, policy makers, administrators and those responsible for implementation. 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 an anticipatory investment in the health of the nation.⁴

The Anganwadi sevika is a community based voluntary frontline worker of the ICDS programme selected from the community to which she belongs. She is the main force of the scheme and assumes a pivotal role in it due to her close and continuous contact with the beneficiaries. She has to carry different types of job responsibilities as key personnel of the program. She has to reach to the beneficiaries to provide them various services.³ ICDS scheme has a focus on the physical, mental, social, emotional and spiritual health of the beneficiaries. These workers are an asset in timely diagnosis of the illness among the beneficiaries and responsible for their overall development. The Anganwadi sevika focuses on proper psychological, physical and social development of the child. She tries to reduce morbidity and mortality among children below six years of age. She works to achieve effective co-ordination of policy and implementation amongst the various departments to promote child development. The components of package of services in the ICDS are supplementary nutrition, immunization, health check-ups, health education, referral services and non-formal education.⁴

As mentioned above, Anganwadi sevika works for holistic development of children under the age of six years, women in the reproductive age group, pregnant and lactating mothers. These Anganwadi sevikas are overburdened and not able to justify their routine work.⁵ Periodic education on various aspects of growth monitoring of children is needed for Anganwadi Sevikas.⁷ Anganwadi sevikas' services are essential to reduce malnutrition among children and infant mortality.⁸ Their services are important to fight mental and physical disability among children. Socio-demographic and health status of the Anganwadi workers should be sound and at the optimum level, to carry out various job responsibilities assigned to them under the ICDS program efficiently. Anganwadi sevikas are considered cornerstone of ICDS programme, but most of these key workers are not at their good health. Regular health examination of Anganwadi sevikas is essential to run the activities under ICDS programme effectively.¹²

The output of the Anganwadi is to a great extent depends on the health and socio-demographic profile of the

Anganwadi sevika. Taking into consideration of various factors this cross-sectional study was conducted to know the current socio-demographic and health status of the Anganwadi sevikas working in the catchment area of two rural health training centers of Rajiv Gandhi Medical College, Thane.

METHODS

This descriptive cross-sectional study was conducted in the month of July, 2024 among Anganwadi sevikas of ICDS scheme working in the catchment area of two rural health training centers of Rajiv Gandhi Medical College, Thane. Total 58 Anganwadi sevikas were included in the study using purposive sampling method. Necessary permissions and approvals were obtained. The subjects were well informed about the purpose of the study. The confidentiality of the information was assured. Inclusion and exclusion criteria were defined. The Anganwadi sevikas who were willing to participate were included in the study. Those Anganwadi sevikas who were not willing to participate in the study were excluded. The consent of the subjects was obtained before the commencement of the study. The data related to socio-demographic factors and health profile of the Anganwadi sevikas was recorded in pre-designed and pre-tested formatted proforma by interviewing them. The data was entered in Microsoft Excel and analysed. The results were represented in the tables. Statistical test of significance i.e. standard error of difference between two proportions was applied to interpret the results. The statistical level of significance was fixed at $p < 0.05$.

RESULTS

Total 58 Anganwadi sevikas were included in the study. The mean, mode, median, range, standard deviation (SD) and coefficient of variation (CV) of the age of the subjects were 45.98, 38, 45.50, 39, 9.51 and 20.68 years respectively. The mean, mode, median, range, standard deviation and coefficient of variation of the height of the subjects were 152, 150, 152, 29, 5.92 and 03.89 cm respectively. The mean, mode, median, range, standard deviation and coefficient of variation of weight of the subjects were 54.60, 58, 54.50, 39, 9.41 and 17.23 kg respectively. The mean, mode, median, range, standard deviation and coefficient of variation of experience of Anganwadi sevikas were 16.50, 17, 16, 40, 9.61 and 58.24 years respectively. The mean, mode, median, range, standard deviation and coefficient of variation of systolic blood pressure of Anganwadi sevikas were 124.55, 120, 125, 38, 8.49 and 06.82 mmHg respectively. The mean, mode, median, range, standard deviation and coefficient of variation of diastolic blood pressure of Anganwadi sevikas were 78.41, 80, 80, 26, 5.46 and 06.96 mmHg respectively. The mean, mode, median, range, standard deviation and coefficient of variation of body mass index (BMI) of Anganwadi sevikas was 23.63, 26.78, 23.66, 14.75, 3.88 and 16.42 kg/m² (Table 1).

Table 1: Measures of central tendency and variation of age, height, weight, experience, systolic and diastolic blood pressure of Anganwadi sevikas (n=58).

Variables	Mean	Mode	Median	Range	SD	CV
Age in years	45.98	38	45.50	39	9.51	20.68
Height in centimeters	152	150	152	29	5.92	03.89
Weight in kilograms	54.60	58	54.50	39	9.41	17.23
Experience in years	16.50	17	16	40	9.61	58.24
Systolic BP in mmHg	124.55	120	125	38	8.49	06.82
Diastolic BP in mmHg	78.41	80	80	26	5.46	06.96
BMI kg/m ²	23.63	26.78	23.66	14.75	3.88	16.42

Table 2: Socio-demographic characteristics and health status of the subjects (n=58).

Variables	Frequency (n=58)	Percentage (100.0)	Subjects with health problems (n=17)	Percentage (29.31)	P value
Age in years					
18-40	17	29.31	03	17.64	0.59
>40-58	41	70.69	14	24.14	
Diet					
Vegetarian	00	00.00	00	00.00	
Mixed	58	100.0	17	29.31	
Education					
<Graduate	33	56.90	10	30.30	0.85
Graduate	25	43.10	07	28.00	
Marital status					
Married	58	100.0	17	29.31	
Religion					
Hindu	58	100.0	17	29.31	
Training					
Yes	58	100.0	17	29.31	
Type of Family					
Nuclear	16	27.59	05	31.25	0.84
Joint/extended nuclear	42	72.41	12	28.57	
Location of the house of Anganwadi sevikas					
Urban	02	03.45	02	100.0	0.02
Rural	56	96.55	15	26.79	
Ownership of the house					
Owned	58	100.0	17	29.31	

Of the 58 subjects, 17 (29.31%) were in the age group of 18-40 years while 41 (70.69%) were in the age group of >40-58 years. 17 (29.31%) subjects were suffering from one or more non-communicable health problems while 41 (70.69%) did not have any health issues at the time of study. Of the 17 (29.31%) subjects with health issues, nobody was suffering communicable disease. Of the 17 (29.31%) subjects in the age group of 18-40 years, 03 (17.64%) and of the 41 (70.69%) subjects in the age group of >40-58 years, 14 (24.14%) were suffering from one or more non communicable health problem. All 58 subjects were having mixed diet. Of the 33 (56.90%) subjects who were educated < graduation 10 (30.30%) and of the 25 (43.10%) graduate 07 (28.00%) were having one or more non communicable health problems. All the subjects were married. All the subjects were

Hindu by religion. Of the 16 (27.59%) subjects from nuclear family 05 (31.25%) and of the 42 (72.41%) subjects from joint/extended nuclear family 12 (28.57%) were having one or more non communicable health issues. 02 (03.45%) subjects were staying in urban locality and both of them were having one or more non communicable health issues. 56 (96.55%) were staying in rural locality of which 15 (26.79%) were having one or more non communicable health problems. The difference is statistically significant at $p < 0.05$. All the subjects were having their own house. All the subjects have undergone periodic training related to ICDS programme (Table 2).

Of the 58 subjects, 17 (29.31%) were having one or more non-communicable health problems at the time of study.

Nobody was suffering from communicable disease (Table 3).

Table 3: Distribution of current morbidity pattern among the Anganwadi sevikas (n=58).

Morbidity pattern	Frequency	Percentage
Anganwadi sevikas with health problems	17	29.31
Anganwadi sevikas without health problems	41	70.69
Suffering from non-communicable diseases	17	29.31
Suffering from communicable diseases	00	00.00

At the time of study, 13 (22.41%) subjects were suffering from musculoskeletal disorders, 03 (05.17%) were suffering from hypertension, 03 (05.17%) were obese, 07 (12.07%) were overweight, 02 (03.45%) were suffering from hypotension, 02 (03.45%) were from hypothyroidism and 01 (01.72%) was suffering from gall stones. Total 17 (29.31%) subjects were suffering from one or more non-communicable diseases. Nobody was suffering from communicable disease (Table 4).

Table 4: Distribution of current health problems among Anganwadi sevikas (n=58).

Current health problems	Frequency	Percentage
Musculoskeletal disorders	13	22.41
Obesity	03	05.17
Overweight	07	12.07
Hypertension	03	05.17
Hypotension	02	03.45
Hypothyroidism	02	03.45
Gall stones	01	01.72

Table 5: Distribution of past health problems among Anganwadi sevikas (n=58).

Past health problems	Frequency	Percentage
COVID-19	05	08.62
Hysterectomy	03	05.17
History of renal calculus	01	01.72
Operated for cataract	01	01.72
Operated for hemorrhoids	02	03.45
Operated for umbilical hernia	01	01.72
History of abortion	01	01.72
Appendicectomy	01	01.72

Of the 58 subjects, 05 (08.62%) had suffered from COVID-19, 03 (05.17%) had undergone hysterectomy, 01 (01.72%) had operated for cataract, 01 (01.72%) had given history of renal calculus, 02 (03.45%) had operated for hemorrhoids, 01 (01.72%) had operated for umbilical

hernia, 01 (01.72%) had given history of abortion and 01 (01.72%) had undergone appendicectomy. Total 15 (25.86%) subjects have given history of health problem in the past while 43 (74.14%) subjects have not reported history of any health issue in the past (Table 5).

DISCUSSION

In the present study in rural Thane, we interviewed 58 Anganwadi sevikas. 96.55% Anganwadi sevikas were staying in the same village where they are working respectively while 03.45% were staying in nearby urban locality. Majority (70.69%) of them were not having health problems. Only 17 (29.31%) Anganwadi sevikas were suffering from one or more non-communicable diseases. Nobody was suffering from communicable disease. We observed 45.98 years as the mean age of the Anganwadi sevikas. We also observed that, of the 56.90% subjects who were educated < graduation 30.30% and of the 43.10% graduate 28.00% were having one or more non-communicable health problems. All the subjects were married in our study. Parande et al in their study in rural Pune observed, the mean age of the Anganwadi workers was 30.8 years and 41.25% were educated upto secondary level.² They also observed 87% Anganwadi sevikas were from local community. Patil and Doibale conducted a cross-sectional study among 49 Anganwadi centers in two ICDS blocks in Aurangabad, Maharashtra.³ The study utilized stratified sampling to select Anganwadi centers from each block and interviewed Anganwadi workers to gauge literacy levels, years of experience, knowledge about their work as well as problems faced by them. The study found that a majority of Anganwadi workers were 41-50 years old; more than half had completed matriculation and close to 69% had more than 10 years of experience. In the present study in rural Thane, we observed, 70.69% Anganwadi sevikas were in the age group of >40-58 years. Desai et al conducted a cross sectional study of 30 Anganwadi centers in Wagodiya block of Vadodara district in Gujarat using purposive sampling.⁵ They found that the average age of Anganwadi workers in the block was 33.8 years and all of them came from the local community.

The status of Anganwadi workers in Delhi- a pilot study, observed that the majority (87.00%) of the Anganwadi workers surveyed were older than 35 years.⁶ All of the surveyed sevikas have completed secondary school education i.e. 10th standard. Additionally, around 46.00% hold at least a graduate degree. Around 66.00% of the respondents were married and living with their spouse with the average household having more than 5 people. On average, the respondents have more than 2 children. In our study, we observed the average experience of the Anganwadi workers was 16.50 years and all the subjects were married. Bhasin et al in their study among Anganwadi workers in ICDS blocks of Alipur in Delhi, observed, about 48% of the respondents were between the age group 31-40 years while the rest were below 30 years of age.⁷ All of the respondents had studied upto at least

8th standard. In our study in rural Thane, we observed majority i.e. 56.90% respondents were not graduate while 43.10% were graduate. Of the non-graduate, 30.30% and of the graduate, 28.00% was suffering from one or more non-communicable diseases.

Joshi observed, majority (53.00%) Anganwadi workers were in the age range of 20-30 years, and only (05.00%) were in the age range of >50 years.⁸ The majority (45.00%) Anganwadi workers were educated upto secondary; while (34.00%) were educated upto higher secondary and only (03.00%) were educated upto primary class and 18.00% were graduate. 29.00% Anganwadi workers had maximum experience in the range of more than 15 years and the majority (42.00%) had 5-10 years of experience. Baliga et al in their study in Belagavi, observed, out of 76 Anganwadi workers, 33 (43.40%) were in the age group 31-40 years, 37 (48.70%) Anganwadi sevikas had studied upto secondary school and 34 (44.70%) had experience less than 5 years.⁹ Sujatha et al observed majority of Anganwadi workers (71%) were aged less than 40 years, 44.3% were matriculate and 60% had working experience of <10 years, in their study in Raichur city.¹⁰

Debata and Ranganath interviewed 21 Anganwadi workers in the rural field practice area of a tertiary medical college in south India and observed 38.1% Anganwadi workers belonged to the age group of 41-50 years.¹¹ They had good knowledge about delivering different services under ICDS scheme. The authors suggested further improvement is needed for optimizing the outcomes. Awad et al in their study in Mumbai among Anganwadi workers observed, most of the Anganwadi workers themselves were not at their good health.¹² Around 49% of them were having abnormal BMI and 53% were anemic. PAP smear report was abnormal in 4% of the Anganwadi workers. In our study in rural Thane, we observed that the mean BMI of the respondents was 23.63 kg/m², 13 (22.41%) subjects were suffering from musculoskeletal disorders, 05 (08.62%) subjects suffered from COVID-19 in the past and 03 (05.17%) were obese. The findings related to socio-demographic characteristics of the Anganwadi workers in the present study are consistent with the findings of other studies mentioned here. It is recommended that regular health checkups of Anganwadi workers are essential to promote their health.

CONCLUSION

Anganwadi workers play a key role of bridge between the community and integrated child development services programme, which is one of the world's largest children and women development programmes in India. They play vital role in bringing the health and welfare services to the door step of the beneficiaries. These community based frontline workers are in continuous contact with the community and play the most dominant role in providing basic education, nutrition and health promotive activities in the community. These workers are also involved in

running the activities of various national health programmes including family welfare programme. Their own health and welfare is crucial here. Therefore, these Anganwadi sevikas need to be given health and other welfare facilities to promote their own health under ICDS program. This will help and motivate them to take more interest in all the activities of the program to achieve a great success

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