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Original Research Article

Health Status of Anganwadi Workers in an Urban Area-A Cross Sectional Study

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ABSTRACT

Background: Anganwadi workers have been the frontline workers providing a package of services to the children below 6 years of age, females in the reproductive age group, pregnant and lactating mothers under the Integrated Child Development Services (ICDS) programme. Promoting the health and socio-demographic status of this frontline force is critical to improve the delivery of services.

Material and methods: The present descriptive cross-sectional study was conducted in June, 2024 among 48 Anganwadi workers working in the catchment area of urban health training center of Rajiv Gandhi Medical College, Thane. The purposive sampling technique was used to conduct the study. Socio-demographic profile and health status of the Anganwadi workers was recorded in pre-designed and pre-tested proforma by interviewing them. The data was entered in Microsoft Excel and analyzed. The results were interpreted using $SE_{(p1-P2)}$ test of significance. The statistical level of significance was fixed at $p<0.05$.

Results: 48 Anganwadi workers were included in the study. 08(16.67%) subjects were in the age group of 18-40 years while 40(83.33%) were in the age group of >40-58 years. Of the 48 subjects, 38(79.17%) were having one or more health problems at the time of study ($p<0.05$). Of the 38(79.17%) subjects with one or more health problems, 31(81.58%) were suffering from non-communicable diseases and 07(18.42%) were suffering from communicable diseases ($p<0.05$).

Conclusion: Previous studies done on Anganwadi workers have focused primarily on the efficiency of service delivery. This study focuses on their socio-demographic and health issues. We observed, majority of the Anganwadi workers were suffering from non-communicable diseases.

Keywords: Anganwadi Worker, Health Problems, ICDS

INTRODUCTION

In India, a frontline community health worker known as an Anganwadi worker is employed at the local level. Another name for her is Anganwadi Sevika. Her main goal is to address the important health issues pertaining to mothers and children. 'Anganwadi' refers to a particular kind of mother and child care facility. Anganwadi Sevikas, who work in tandem with the current healthcare delivery system, oversee each Anganwadi with the assistance of an assistant.[1] In an effort to tackle child hunger and malnutrition, the Indian government established these centres as a component of the Integrated Child Development Services (ICDS) program. Children are a nation's most valuable resource. Children's development is just as vital as the development of material resources. Launched on October 2, 1975, the Integrated Child Development Services Scheme is the Government of India's most extensive and exceptional outreach initiative for early childhood

care and development. Its goal is to improve the survival and development of kids from the most disadvantaged groups in society.[2] The largest outreach program in the world, ICDS, focusses on pregnant and nursing mothers, females in the reproductive age range of 15 to 49 years, and babies and children under the age of six. Academicians, planners, policy makers, administrators, and those in charge of implementation around the world have expressed interest in ICDS. A nation's future depends on its children, and only healthy moms can bear fruit. Any expenditure made for their health and happiness is a preventative investment in the country's health.[3] Anganwadi workers (AWWs) are volunteer frontline workers of the ICDS program who are chosen from within their community. She is the driving force behind the program and plays a crucial part in it because of her frequent and intimate interactions with the beneficiaries. She is a vital member of the program's staff and must perform a variety of duties. She needs to get in touch with the recipients to offer them other services[2]. The beneficiaries' physical, mental, social, emotional, and spiritual well-being is the main focus of the ICDS program. These employees play a crucial role in the prompt diagnosis of the beneficiaries' illnesses and are in charge of their general development. The correct psychological, physical, and social development of the child is the primary focus of the Anganwadi worker. Her goal is to lower the morbidity and mortality rate for kids less than six. In order to support child development, she strives for efficient coordination of policy and implementation among the many departments. Supplemental nutrition, vaccinations, health examinations, health education, referral services, and non-formal education are all included in the ICDS package of services.[3] The Anganwadi workers' socio-demographic profile and overall health play a major role in determining the program's results. Anganwadi Sevika, as previously said, promotes the holistic development of women in the reproductive age group, expectant moms, and children under the age of six. In their study in Vadodara, Gujarat, Desai G. et al.[4] found that the Anganwadi personnel were overworked and unable to justify their regular labour. In their study conducted in Delhi, Bhasin SK et al.[6] proposed that Anganwadi personnel should get ongoing training on a variety of growth monitoring-related topics. Anganwadi workers' services are crucial to lowering infant mortality and child malnutrition; according to Kalpana Joshi's study[7]. The services are crucial in the fight against childhood physical and mental disabilities. For the Anganwadi workers to effectively perform the numerous job duties allocated to them under the ICDS program, their socio-demographic and health conditions must be sound and at the highest possible level. Although Anganwadi staff is regarded as the program's cornerstone, the majority of these vital employees are not in good health. Effective operation of the ICDS program depends on the regular health screening of Anganwadi personnel. Taking into consideration of all above factors this cross-sectional study was conducted to know the current socio-demographic and health status of the Anganwadi workers working in the catchment area of the urban health training center of Rajiv Gandhi Medical College, Thane.

MATERIAL AND METHODS

The present descriptive cross-sectional study was conducted in the month of June, 2024 among Anganwadi workers of ICDS scheme working in the catchment area of urban health training center of Rajiv Gandhi Medical College, Thane. 48 Anganwadi workers 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 workers 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 workers 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 used to interpret the results. The statistical level of significance was fixed at $p < 0.05$.

RESULTS

Total 48 Anganwadi workers 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 47.79, 49.00, 47.00, 22,

05.95 and 12.45 years respectively. The mean, mode, median, range, standard deviation and coefficient of variation of the height of the subjects were 154.89, 152.00, 155.00, 36.00, 06.51 and 04.20 cm respectively. The mean, mode, median, range, standard deviation and coefficient of variation of weight of the subjects were 58.51, 60.00, 59.00, 43, 09.59 and 16.39 kg respectively. The mean, mode, median, range, standard deviation and coefficient of variation of experience of Anganwadi workers were 20.65, 22, 22, 11, 03.30 and 15.98 years respectively. The mean, mode, median, range, standard deviation and coefficient of variation of systolic blood pressure of Anganwadi workers were 127.76, 120, 122, 68, 17.68 and 13.84 mmHg respectively. The mean, mode, median, range, standard deviation and coefficient of variation of diastolic blood pressure of Anganwadi workers were 86.80, 90, 88, 48, 11.08 and 12.76 mmHg respectively. The mean, mode, median, range, standard deviation and coefficient of variation of Body Mass Index (BMI) of Anganwadi workers was 24.39, 25.4, 25.4, 11.8, 1.66 and 6.37 kg/m^2. (Table-1)

Table-1: Measures of central tendency and variation of age, height, weight, experience, BMI, systolic and diastolic blood pressure of Anganwadi workers (n=48)

Variables	Mean	Mode	Median	Range	SD	CV
Age in Years	47.79	49	47	22	05.95	12.45
Ht in cm	154.89	152	155	36	06.51	04.20
Wt in kg	58.51	60	59	43	09.59	16.39
Experience in Yrs	20.65	22	22	11	03.30	15.98
Systolic BP in mmHg	127.76	120	122	68	17.68	13.84
Diastolic BP	86.80	90	88	48	11.08	12.76
BMI kg/m^2	24.39	25.4	25.4	11.8	1.66	6.37

Of the 48 subjects, 08 (16.67%) were in the age group of 18-40 years while 40 (83.33%) were in the age group of >40-58 years. 38 (79.17%) subjects were having one or more health problems while 10 (20.83%) did not have any health issues at the time of study. Of the 08 (16.67%) subjects in the age group of 18-40 years, 03 (37.50%) and of the 40 (83.33%) subjects in the age group of >40-58 years, 35 (87.50%) were having health problem at the time of study ($p < 0.05$). 07(14.58%) subjects were vegetarian of which 05 (71.43%) and of the 41 (85.42%) having mixed diet, 33(80.49%) were having health problem ($p > 0.05$). Of the 38 (79.17%) who were educated < graduation, 32 (84.21%) and of the 10 (20.83%) graduate, 06 (60.00%) were having health problem ($p = 0.09$). Of the 45 (93.75%) married subjects, 37 (82.22%) while of the 03 (06.25%) unmarried/widow, 01(33.33%) was with health issue ($p < 0.05$). Among unmarried/widow group(n=03), 01(33.33%) was unmarried and 02 (66.67%) were widows. All the 48 (100.00%) subjects were Hindu by religion. Of the 41(85.42%) subjects from nuclear family, 35 (85.37%) and of the 07 (14.58%) subjects from joint/extended nuclear family, 03 (42.86%) were having health issue ($p < 0.05$). 13 (27.08%) subjects were staying in slum/chawl of which 09 (69.23%) and 35 (72.92%) were staying in building of which 29 (82.86%) were having health problem ($p = 0.31$). 44 (91.67%) subjects were having their own house of which 36 (81.82%) and 04 (08.33%) were staying in rented house of which 02 (50.00%) were having health problem ($p=0.13$). All the subjects have undergone periodic training related to ICDS programme. (Table-2)

Table-2: Socio-demographic characteristics and health status of the subjects (n=48)

Parameters	Frequency (n=48)	% (100 %)	Subjects with health problem (n=38)	% (79.17%)	P value
Age in Years					
18-40	08	16.67	03	37.50	0.00
>40-58	40	83.33	35	87.50	
Diet					
Vegetarian	07	14.58	05	71.43	0.58
Mixed	41	85.42	33	80.49	
Education					
< Graduate	38	79.17	32	84.21	0.09
Graduate	10	20.83	06	60.00	

Marital status					
Married	45	93.75	37	82.22	0.04
Unmarried/ Widow	03	06.25	01	33.33	
Religion					
Hindu	48	100.0	38	79.17	
Training					
Yes	48	100.0	38	79.17	
Type of Family					
Nuclear	41	85.42	35	85.37	0.01
Joint/Ext. Nuclear	07	14.58	03	42.86	
Location of the House					
Slum/Chawl	13	27.08	09	69.23	0.31
Building	35	72.92	29	82.86	
Type of House					
Owned	44	91.67	36	81.82	0.13
Rented	04	08.33	02	50.00	

Of the 48 subjects, 38 (79.17%) were having one or more health problems at the time of study ($p < 0.05$). Of the 38 (79.17%) subjects with health problem, 31 (81.58%) were suffering from non-communicable diseases while 07(18.42%) were suffering from communicable diseases ($p < 0.05$). (Table-3)

Table-3: Current morbidity pattern among the Anganwadi Workers (n=48)

Morbidity Pattern (n=48)	Frequency	%	P Value
Anganwadi Workers with Health Problems	38	79.17	**< 0.05**
Anganwadi Workers without Health Problems	10	20.83	
Suffering from Non-Communicable Diseases	31	81.58	**< 0.05**
Suffering from Communicable Diseases	07	18.42	

At the time of study, 08 (16.67%) subjects were suffering from musculoskeletal disorders, 08 (16.67%) were suffering from skin disorders, 07 (14.58%) were hypertensive, 06 (12.50%) were obese, 05 (10.42%) were suffering from asthma, 05 (10.42%) were diabetic, 04 (08.33%) were with hypotension, 04 (08.33%) were suffering from anemia and 03 (06.25%) were suffering from hypothyroidism. Other morbidities among the symptomatic subjects were acidity, hyperthyroidism, upper respiratory tract infection (URTI), gall stones and fracture of left leg. As mentioned above, total 38 (79.17%) subjects were having and 10 (20.83%) were without health problem at the time of study. 07 (18.42%) subjects were having more than one health problems. (Table-4)

Table-4: Current health problems among Anganwadi Workers (n=48)

Current Health Problems	Frequency	Percentage
Musculoskeletal disorders	08	16.67
Obesity	06	12.50
Acidity	02	04.17
Skin disorders	08	16.67
Hyperthyroidism	01	02.08
URTI	01	02.08
Anemia	04	08.33
Asthma	05	10.42
Hypertension	07	14.58
Diabetes	05	10.42
Hypotension	04	08.33
Hypothyroidism	03	06.25
Fracture of Left Leg	01	02.08
Gall stones	01	02.08

Of the 48 subjects, 05 (10.42%) suffered from Covid-19, 04 (08.33%) undergone hysterectomy, 03 (06.25%) operated for cataract, 08 (16.67%) have given history of lower segment caesarian section (LSCS), 01 (02.08%) subject met with an accident in the past, 01 (02.08%) has given history of dog bite and 01 (03.23%) subject has given history of snake bite. Thus, total 23 (47.92%) subjects have given history of major health problem in the past while 25(52.08%) subjects have not reported history of any major health issues in the past. (Table-5)

Table-5: Past health problems among Anganwadi Workers (n=48)

Past Health Problems (n=48)	Frequency	Percentage
Covid-19	05	10.42
Hysterectomy	04	08.33
Dog bite	01	02.08
Cataract	03	06.25
Accident	01	02.08
Snake bite	01	02.08
LSCS	08	16.67

DISCUSSION

All the 48 Anganwadi workers were from the local community. Majority of them were having various health problems. Among Anganwadi workers with health problems majority them were suffering from non-communicable diseases. Parande M A et al[1] 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. They also observed 87% Anganwadi Sevikas were from local community. Patil SB and Doibale MK[2] conducted a cross-sectional study of 49 Anganwadi centers in two ICDS blocks in Aurangabad, Maharashtra. 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 we observed, 40(83.33%) Anganwadi workers were in the age group of >40-58 years. Desai G et al[4] conducted a cross-sectional study of 30 Anganwadi centers in Wagodiya block of Vadodara district in Gujarat using purposive sampling. 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. In our study the mean age of the Anganwadi workers was 47.79 years. The Status of Anganwadi workers in Delhi-A Pilot Study,[5] observed that the majority (87.00%) of the Anganwadi workers surveyed were older than 35 years. All of the surveyed women 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, 01(02.08%) respondent was having more than 2 children while 46(95.84%) subjects were having one or two children. 01(02.08%) subject was unmarried. Around 46.00% had been working for 5-10 years, while close to 30.00% had been working for more than 20 years. In our study, we observed the average experience of the Anganwadi workers was 20.65 years. Bhasin SK et al[6] 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. All of the respondents had studied upto at least 8th standard. In our study, we observed majority i.e. 38(79.17%) respondents were not graduate while rest were graduate. Kalpana Joshi[7] observed, majority (53.00%) of the Anganwadi workers were in the age range of 20-30 years, and only 05.00% were in the age range of >50 years. The majority (45.00%) Anganwadi workers were educated upto secondary; while (34.00%) were educated upto higher secondary and only (03.00%) were educated up to 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 SS et al[8] 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 Workers had studied upto secondary school and 34(44.70%) had experience less than 5 years. Sujatha N et al[9] 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. Ipsita Debata and TS Ranganath[10] 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. They had good knowledge about delivering different services under ICDS scheme. The authors

suggested further improvement is needed for optimizing the outcomes. Milind N. Awad et al[11] in their study in Mumbai among Anganwadi workers observed, most of the Anganwadi workers themselves were not at their good health. 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 we observed that the mean BMI of the respondents was 24.39 kg/m^2, 04(08.33%) subjects were suffering from anemia and 06(12.50%) were obese. They recommended regular health checkups of Anganwadi workers are essential to promote their health. 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.

CONCLUSION

One of the biggest child and women development programs in the world, the Integrated Child Development Services Program, is implemented in India, and Anganwadi workers are essential in serving as a link between the community and the program. They are essential in getting welfare and health services to the recipients' doorsteps. These frontline workers in the community are always in communication with the community and are primarily responsible for delivering health promotion activities, nutrition education, and basic education. These workers are also in charge of overseeing the Family Welfare Program and other national health initiatives. Here, it is vital for their own health and welfare. In order to support their own health under the ICDS program, these Anganwadi Sevikas must be provided with health and other welfare amenities. This will encourage and assist them to become more involved in all program activities in order to attain tremendous achievement.

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