

Assessment of awareness on Covid-19 among rural and urban women of Agra District

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Abstract

Covid-19 has become a major global human problem that is caused by a novel coronavirus. Coronavirus is one of the major pathogens that mainly targets the human respiratory system. The present study was planned to assess the awareness on Covid-19 in urban and rural areas of Agra. Multi-stage random sampling was used for area selection. Two villages and two slum areas were selected. A hundred women were selected aged between eighteen to sixty years by lottery method. A self-structured questionnaire was used for collecting the data. Awareness of respondents was assessed on general information, health, hygiene, vaccination and nutrition regarding Covid-19. The finding of the study explains that Out of the total respondents, the majority of the women 53.00% had average hygiene awareness, 38.00% women had good vaccination awareness and 47.00% women had average and good nutrition awareness. There is no statistically significant relationship between the awareness about covid-19 and the socio-economic status of women residing in urban and rural areas of Agra.

The Covid-19 pandemic has caused a major public health problem around the world. The first case was identified in Wuhan City, Hubei Province, China. It has spread rapidly throughout the world³. World Health Organization⁹ announced on February 28, 2020, that the Covid-19 outbreak is a public health emergency of International Concern. It is spread by person-to-person transmission and by contact with contaminated surfaces. Virus is spread between people who are in

close contact with other infected people and infected the respiratory tract. Transmission is increase when an individual touches a contaminated surface¹. According to the WHO⁹, physical distancing, wearing a mask, ventilated rooms, avoiding public areas, hands washing, and coughing into a bent elbow are some of the precautions that can be helpful to reduce the chances of Covid-19 outbreak⁶. Government has implemented lockdowns and quarantines to help in decreasing the rate of

infection. Public awareness is necessary to reduce the rate of infections. It can be reduced by the inclusion of some protocols such as increased hygienic care and social distancing. There is a need to create awareness regarding disease transmission, vaccine availability and medical care². Health and nutrition awareness play a key role in reducing infections by promoting good health, increasing care outcomes, and avoiding future health issues. Nutritional awareness improves the nutritional status of population⁸.

Objectives :

- To assess the socio economic status of urban and rural women of Agra District.
- To assess the awareness of women on Hygiene, vaccination and nutrition during Covid-19.
- To find the association between awareness about covid-19 and socio-economic status of urban and rural women.

Methodology :

The study was conducted in urban and rural areas of Agra district. Multi-stage random sampling was used for area selection. Two

villages and two slum areas were selected. A Hundred women were selected aged between eighteen to sixty years by lottery method. A self-structured questionnaire was used. Door to door survey was conducted to collect the data. The Kuppuswamy scale was used for assessing the socio- economic status of the selected respondents. Awareness of respondents were assessed on general information, health, hygiene, vaccination and nutrition regarding Covid-19. Scoring procedure was used for evaluating the awareness level of respondents. Total number of answer level was 60 divided into three parts such as 1 to 30 poor, 31 to 40 average and 41 to 60 good.

Table-1 indicates the frequency and percentage distribution of urban and rural women according to socio-economic status. Out of the total respondents, majority of them (39.00%) women were from 16-25 upper middle and 11-15 lower middle socio economic class, followed by (13.00%) women were from 26-29 upper socio economic class and lowest percentage (9.00%) women from 5-10 upper lower class and further table depicts the socio economic class of women in urban area, majority of them (48.00%) women were from 16-25 upper middle followed by (28.00%)

Table-1. Distribution of Socio-economic status of respondents

SES score	Urban		Rural		Total	
	Frequency	%	Frequency	%	Frequency	%
<5 Lower	0	0.00	0	0.00	0	0.00
5-10 Upper Lower	2	4.00	7	14.00	9	9.00
11-15 Lower Middle	14	28.00	25	50.00	39	39.00
16-25 Upper Middle	24	48.00	15	30.00	39	39.00
26-29 Upper	10	20.00	3	6.00	13	13.00
Total	50	100	50	100	100	100

women were 11-15 lower middle, 20 percent women were 26-29 upper class and 4 percent women were 5-10 upper lower class. Socio economic score of women in rural area, majority (50.00%) women were from 11-15

lower middle class followed by (30.00%) women were 16-25 upper middle class, 14 percent women were from 5-10 upper lower class and 6 percent women were 26-29 upper class.

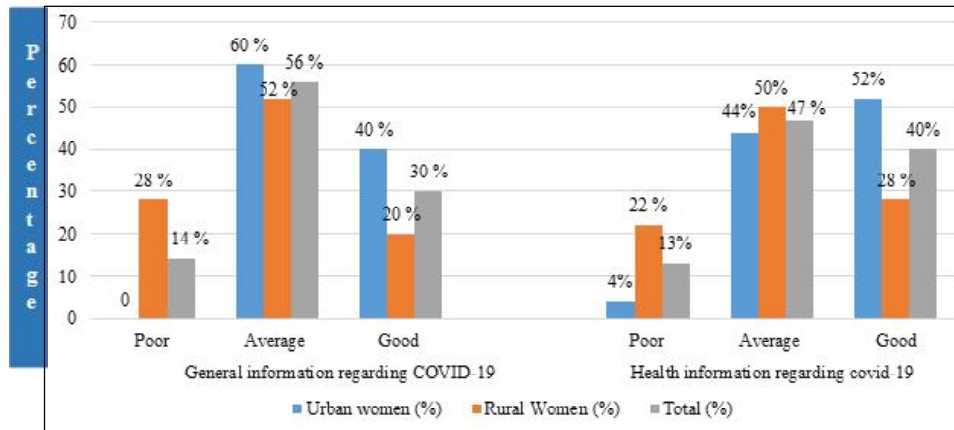


Fig. 1. Distribution of respondents according to general and health information regarding Covid-19

Above data reveals the distribution of respondents according general and health information regarding Covid-19 in urban and rural areas (Fig. 1). Out of total respondents, majority of them (56.00%) were had average general information followed by (30.00%) women were had good information regarding Covid-19 and least percentage of women (14.00%) were had poor knowledge regarding Covid -19 and table further explains about the general information regarding Covid-19 in urban area, majority of them (60.00%) were had average general information followed by (40.00%) women were had good information regarding Covid-19. In rural area, majority of them (52.00%) were had average general information, followed by (28.00%) women were had poor information regarding Covid-19 and least percentage of women (20.00%) were had good information regarding covid-19.

Further Fig. 1 depicts the health information regarding Covid -19 in urban and rural areas. Out of total respondents, majority of them (47.00%) had average health information, followed by (40.00%) women had good information regarding Covid-19 and least percentage of women (13.00%) had poor health information regarding Covid -19. In urban area, majority of them (52.00%) were had good health information, followed by (44.00%) women had average information regarding Covid-19 and (4.00%) women were had poor health information regarding Covid-19. In rural area, majority of them (50.00%) were had average health information, followed by (28.00%) women were had good information regarding Covid-19 and least percentage of women (22.00%) were had poor health information regarding covid-19.

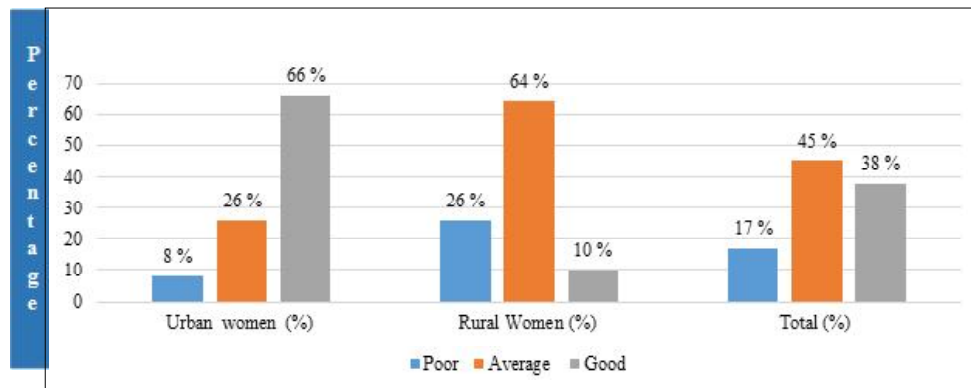


Fig. 2. Distribution of respondents according to awareness level about Covid-19.

Fig. 2 shows the distribution of respondents according to awareness level regarding covid-19 in rural and urban areas. Out of total respondents, majority of them (45.00%) were had average awareness level, followed by (38.00%) women were had good awareness level and least percentage of women (17.00%) were had poor awareness level regarding Covid -19 and table further explains about the awareness level regarding Covid-19 in urban area, majority of them

(66.00%) were had good awareness level followed by (26.00%) women had average awareness level and least percentage of women (8.00%) poor awareness level regarding Covid-19. In rural area, majority of them (64.00%) were had average awareness level, followed by (26.00%) women were had poor awareness level and least percentage of women (10.00%) were had good awareness level regarding covid-19.

Table-2. Distribution of women according to awareness on hygiene, vaccination and nutrition in urban and rural areas during Covid-19 :

S.No.			Urban women (%)	Rural women (%)	Total (%)
1.	Hygiene awareness	Poor	6.00	44.00	25.00
		Average	66.00	40.00	53.00
		Good	28.00	16.00	22.00
2.	Vaccination awareness	Poor	12.00	42.00	27.00
		Average	22.00	48.00	35.00
		Good	66.00	10.00	38.00
3.	Nutrition awareness	Poor	8.00	4.00	6.00
		Average	36.00	58.00	47.00
		Good	56.00	38.00	47.00

Table-2 reveals the distribution of women according to awareness on hygiene, vaccination and nutrition in urban and rural areas regarding covid-19. According to hygiene awareness regarding Covid-19, Out of the total respondents, majority of them (53.00%) women had average awareness, followed by (25.00 %) had poor awareness and lowest percentage of women (22.00%) had good awareness on hygiene regarding Covid-19. In urban area, Most of the women (66.00%) had average awareness, followed by (28.00 %) had good awareness and only (6.00%) had poor awareness on hygiene regarding Covid-19. Hygiene awareness regarding Covid-19 in rural areas, majority of the women (44.00 %) had poor hygiene awareness, followed by (40.00%) had average hygiene awareness and lowest percentage of women (16.00%) had good hygiene awareness regarding Covid-19. Rehman *et al.*,⁷ found that a positive attitude of women towards maintaining hand hygiene (99%), wearing face masks outside the home (90%), and going outside only when it was necessary (81%), with a significantly majority of the respondents were practiced to keep themselves safe from the infection.

According to vaccination awareness among women regarding Covid-19, Out of the total respondents, majority of them (38.00%) women had good awareness, followed by

(35.00 %) had average awareness and least percentage of women (27.00%) had poor awareness on vaccination regarding Covid-19. Vaccination awareness in urban area, Most of the women (66.00%) had good awareness, followed by (22.00 %) had average awareness and 12.00% had poor vaccination awareness regarding Covid-19. In rural areas, majority of the women (48.00 %) had average awareness, followed by (42.00%) had poor awareness and lowest percentage of women (10.00%) had good awareness on vaccination regarding Covid-19.

According to nutrition awareness among women regarding Covid-19, Out of the total respondents, majority of them (47.00%) women had average and good nutrition awareness and least percentage of women (6.00%) had poor nutrition awareness regarding Covid-19. Nutrition awareness in urban area, Most of the women (56.00%) had good awareness, followed by (36.00 %) had average awareness and 8.00% had poor awareness on nutrition regarding Covid-19. In rural areas, majority of the women (58.00 %) had average awareness, followed by (38.00%) had good awareness and very few women (4.00%) had poor awareness on nutrition regarding Covid-19. According to Di Renzo *et al.*,⁵ found that during Covid-19 lockdown, 37.4% and 35.8% of population were used to eat less healthy food.

Table-3. Difference between level of awareness among rural and urban women about covid-19

Area of Residence	Frequency	Mean \pm S.D.	t-value	p-value
Urban	50	45.18 \pm 6.47	8.466	0 > 0.05
Rural	50	31.44 \pm 9.47		

Table-3 shows level of awareness among urban and rural women about covid-19. It is evident that awareness level in urban

areas was higher (45.18) than that of women (31.44) residing in rural areas. This is also evident by t value which is non significant.

Table-4. Association between the awareness about Covid-19 and socio-economic status of urban women

Variables	Mean \pm S.D.	r-value	p-value
Awareness score	45.18 \pm 6.47	- 0.0994	0.493 > 0.05
SES score	14.84 \pm 5.37		

Table no. 4. shows the correlation between awareness and socio-economic status score among urban women. It shows that the coefficient of correlation between awareness regarding covid-19 and the socio-economic score of urban women is very much less negatively correlated. Hence, there is no statistically significant relationship between the awareness about covid-19 and the socio-economic status score of urban women.

Table-5. Association between the awareness about covid-19 and socio-economic status of rural area

Variables	Mean \pm S.D.	r-value	p-value
Awareness Score	31.44 \pm 9.47	0.156	0.277 > 0.05
SES Score	14.74 \pm 4.59		

Table no. 5. shows the correlation between awareness level and socio-economic status score among rural women. It shows that the coefficient of correlation between awareness regarding covid-19 and the SES of urban women is very much less positively correlated. Also P. value is greater than the level of significance ($\alpha = 0.05$). Hence, there is no statistically significant relationship between the awareness about covid-19 and the socio-economic status of urban women.

On the basis of the result obtained from the present study entitled "Assessment of awareness on covid-19 among rural and urban women of Agra district" It can be conclude that majority of (39.00%) women were belonged to the upper middle and lower middle socio economic status. Majority of the women (53.00%) had average hygiene awareness, 38.00% women had good vaccination

and 47.00% women had average and good nutrition awareness. Correlation between awareness about Covid-19 and socio-economic status score among urban and rural women and found that there is no statistically significant relationship between the awareness about covid-19 and the socio-economic status of women residing in urban and rural areas of Agra.

References :

1. Abdelhafiz, A.S., Z. Mohammed, M.E. Ibrahim, H.H. Ziady, M. Alorabi, M. Ayyad, and E. A. Sultan, (2020). (COVID-19) *Journal of Community Health*, 45: 881–890.
2. Balkhy, HH., MA. Abolfotouh, RH. Al-Hathloul and MA. Al-Jumah (2010). *BMC Infectious Disease*, 10(1): 42.
3. Centers for Disease Control and Prevention

- (CDC). (2019) About 2019 Novel Coronavirus (2019-nCoV) 2019. Retrieved from: <https://www.cdc.gov/coronavirus/2019> <https://www.cdc.gov/coronavirus/2019>
4. Hauner, H. (2005). *Proceeding of the Nutrition Society*, 64: 163–9.
 5. Di Renzo, L., P. Gualtieri, F. Pivari, L. Soldati, A. Attinà, G. Cinelli, and ... A. De Lorenzo, (2020). *Journal of Translational Medicine*, 18(1): <https://doi.org/10.1186/s12967-020-02399-5>
 6. She, J., J. Jiang, L. Ye, L. Hu, C. Bai, and Y. Song, (2020). *Clinical and Translational Medicine*, 9: 19.
 7. Rahman, T., M.D.G. Hasnain and A. Islam, (2021). *PLoS ONE*, 16(7 July). <https://doi.org/10.1371/journal.pone.0255392>
 8. Spronk, I., C. Kullen, C. Burdon, and H. Connor (2014). *British Journal of Nutrition*, 111(10): 1713-26.
 9. World Health Organization (2020). Novel coronavirus (2019-nCoV) situation report weekly epidemiological update 2020. Retrieved from: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200824-weekly-epi-update.pdf?sfvrsn=806986d1_4