

**Research Article**

## A Study of Psychosocial and Economic Impact of COVID 19 Pandemic among Sanitation Workers of a Tertiary Care Hospital

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**Abstract:** Covid-19 pandemic has a great psychosocial impact on society, due to fear of infection and disturbed the economy of the people. The aim of the study is to assess the psychosocial and economic impact of Covid-19 pandemic among sanitation workers of a tertiary care hospital. A cross sectional study was carried out from August 2020 to September 2020 at Kurnool Medical College, Kurnool. In previous studies, 75% of study subjects responded that Covid-19 has a serious psychosocial and economic impact. Considering prevalence of 75% and 20% of allowable error, sample size arrived at is 33.4, using the formula  $4pq/l^2$ . Out of 100 sanitation workers of one outsourcing agency, 30 workers who fulfilled inclusion criteria of one year work experience and with at least one school going child, were selected by simple random sampling. IEC clearance, permission from the work supervisor and informed consent from the study subjects was obtained. Data collected using a semi structured questionnaire was analysed using MS Excel-2016 version. Majority were in the age group of 31-40 years (63.33%). Most of them were females (90%), 50 % were literates. Decreased family income was noticed among 60% of study subjects and decrease in savings among 76.6%. 70% had fear of sickness and 73.33% responded that their children's education was affected. Assurance of job security and social security measures at the work place would help these workers during such pandemics.

**Keywords:** Covid-19, psychosocial impact, sanitation workers, fear, pandemic.

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### INTRODUCTION

Human history is observing a very strange time fighting an invisible enemy, the novel COVID -19. Initially observed in the Wuhan province of china, now spreaded all over the world. On the 30 January 2020, the WHO declared the health outbreak caused by COVID-19 a public health emergency of international concern. World Health Organization (WHO) announced COVID-19 as a global pandemic on March 11th, 2020. On 24 March 2020, the government of India under Prime Minister, Narendra Modi ordered a nationwide lockdown for 21 days and further lockdown in phases, this whole situation has drastically changed the life of people living in India in a matter of days. The population is experiencing a new, unpredictable and rapidly evolving situation. They were confined to stay at home, family dynamics have remarkably changed, travel was restricted, and there has been a reduction in leisure activities and social life. The work situation has also changed thoroughly; many people have temporary or permanently lost their jobs, many worked from home, sometimes with insufficient preparation for

doing so, and those who work in sectors considered essential appear to experience heavy workloads, increased levels of stress and a greater exposure to the virus. COVID -19 pandemic along with high infectivity is also shown to have psychosocial and economic impact among sanitation workers who are playing important role in maintaining hygiene in the hospital [1, 2]. The income and expenditure of the sanitation workers has been intensely affected by COVID -19. While psychological support is being provided to patients and healthcare workers, the sanitation worker's mental health requires significant attention as well Previous outbreaks have reported that psychological impact of quarantine can vary from immediate effects, like irritability, fear of contracting and spreading infection to family members, anger, confusion, frustration, loneliness, denial, anxiety, depression, insomnia, etc. Hence this study aims to describe the psychosocial and economic impact of COVID -19 among sanitation workers in a tertiary care hospital.

## METHODOLOGY

A Cross sectional study was done at Kurnool Medical College among 30 sanitation workers in the months of August and September 2020 using pre structured Questionnaire and IEC Clearance was obtained (Letter/IEC No.10/2020-KMC, dt: 14-09-2020). Sample size was calculated by using the formula  $4pq / l^2$ . Prevalence was 75% taken from previous studies, allowable error taken as 20 % [3, 4]. Sample size arrived at is 33.4

### Inclusion criteria

1. Sanitation workers belonging to one particular outsourcing agency.
2. One year work experience at Kurnool Medical College.
3. At least having one school going child.

### Exclusion criteria

1. Those that did not fulfill inclusion criteria.

## STATISTICAL ANALYSIS

Data entered and analyzed by using MS Excel version 16, Chi-square test was applied to test the significance. P-value less than 0.05 were considered as statistically significant.

## RESULTS

The study was done in 30 sanitation workers of Kurnool Medical College at Kurnool, Andhra Pradesh. The results of the study are as follows:

**Table-1: Age distribution among study participants**

Age distribution	Percentage of study participants
20-30 years	20%
31-40 years	63.33%
41-50 years	13.33%
>60 years	3.33%

Majority were in the age group of 31-40 years (63.33%). About 90% of the participants are females and 10% are males. 50% of the study participants were literates

**Table-2: Effect on economy in study participants**

Economic variants of the study participant	Increased	Decreased	No Change
Income	-	-	100%
Family income	6.66%	60%	33.3%
Expenditure	100%	-	-
Family expenditure	100%	-	-
Savings of family	-	76.66%	23.33%

All the participants income was not changed in the pandemic but 60% of the participants family income was decreased due to pandemic, the expenditure and family expenditure was increased all the 30 study

participants. Savings of the study participant's family was decreased in 76.66% of the sanitation workers due to the pandemic.

**Table-3: Fear of covid-19 in study participants**

Type of Fear	Percentage of People
Fear of sickness	70%
Fear of isolation from family and society	16.66%
Fear of death	13.33%

About 70% of the study participants were observed to have fear of sickness due to covid-19, 16.66% of participants have fear of isolation from

family and society and 13.33% of them were having fear of death due to covid-19.

**Table-4: Work and Sleep pattern in study participants**

Pattern	Increased	Decreased	No change
Work Pattern	70%	13.33%	16.66%
Sleep Pattern	-	26.6%	73.33%

In 70% of the sanitation workers increased in work pattern was observed, Sleep pattern was decreased in 26.66% of the study participants, about 16.66% of sanitation workers have job loss in their family. Social

gathering in break time during work was decreased in 66.66% of the sanitation workers. 90% of study participants are not having co-morbidities like hypertension, diabetes and thyroid disorders but 10% of

them have co-morbidities and their health care is not affected by covid-19 pandemic.

All the study participants were taking precautionary measures by social distancing, sanitizers and by using mask. About 73.33% of study participant's children's education is affected by Covid-19 pandemic.

## DISCUSSION

In a study on general population in Spain, 3.2% lost their jobs and more than 42% perceived a risk of decreased income in the pandemic, while in present study 16.66% participants have job loss in their family and 60% of participants family income is decreased [4]. One study showed that the psychological distress was higher among non-medical workers in hospitals while in present study there were 30% participants feeling stress in work [5].

## CONCLUSION

The sanitation workers expenditure was very much increased and family income has been decreased with savings affected, along with this the fear of COVID-19 was observed. The following measures can be taken to help the sanitation workers:

Job security and social security measures need to be taken, there is need to provide economic support by increasing salary to the sanitation workers who are working hard in the pandemic. Insurance policies for sanitation workers who work in COVID -19 hospitals. Transport facilities are needed for them to decrease expenditure by travelling. Accommodation facilities should be provided to sanitation workers coming from far places. Some social support is needed for them to avoid the fear of infection. More recruitment of workers is needed to decrease the workload in the COVID-19 Pandemic.

## Limitations of the study

This study is done in sanitation workers of Kurnool Medical College, so the results cannot be general population. The study is conducted in sanitation workers belonging to one particular outsourcing agency.

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