

A Study of the Impact of the Covid Pandemic On the Income of the General Population of JAIPUR

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ABSTRACT

The COVID-19 pandemic has emerged as a critical challenge for the current generation. One of its major implications is the adverse impact on the income of the general population. Several studies and reports have documented the significant effect of the pandemic on the earnings of individuals in both formal and informal sectors. Thus, there is an urgent need to investigate the pandemic's impact on various income groups and employment sectors, including government, private, business, professionals, and informal sectors. To explore the consequences of the COVID-19 pandemic on income levels in Jaipur, a research project was conducted. The study encompassed 211 individuals from diverse occupations and income groups to provide a comprehensive understanding of the pandemic's effect on income across different backgrounds and professions. Random sampling technique was used for data collection, and a Google form was employed to design the questionnaire and distribute it to respondents via email. Data collection took place over two months, from January to March 2023. The data collected were analyzed using SPSS software, and a chi-square test was utilized to examine the relationships between different variables. The participants were asked to provide detailed information on how the COVID-19 pandemic has affected their income and work patterns. The study's findings revealed that the impact on different occupations varied and had multiple dimensions. Therefore, policymakers should acknowledge that the pandemic's impact on income levels has not been uniform across different demographics. Consequently, policy responses should be customized to address the specific needs of distinct groups.

INTRODUCTION

The word Pandemic is generally regarded as some kind of disease in form of infection, virus, bacteria, or fungi which may cause consequential health hazards in the population profoundly. This depiction is only one semblance of this multifaceted pervasive, but another major ramification of the pandemic is associated with the income of the general population. Although health issues aroused by these situations must be kept to the highest priority as they are linked with the matter of life and death, nevertheless, impact on income is also having the same extent of sequela on life and survival. Health problems may last till the pandemic duration and even after it. However, the aftermath in terms of income continues for a much longer time. Sometimes it takes almost double the time to recoup and sometimes people never recovered.

The world economy has been greatly affected by the COVID pandemic, in addition to other consequences that it has brought about, with lockdowns and social distancing measures resulting in the closure of many businesses and job losses. The ILO published a report which indicates that the pandemic had resulted in a 60% decrease in working hours, leading to a

10.7% decrease in global income in the second quarter of 2020 (ILO,2020). This had a pronounced impact on income, with many people experiencing reduced income or losing their source of income entirely. The impact of the pandemic on income has been particularly severe among low-income earners and those in the informal sector. According to a survey conducted by the CMIE, in India, the informal sector was the hardest hit when the unemployment rate rose from 7.2% in February 2020 to 23.5% in April 2020. It also revealed that approximately 122 million jobs were lost due to the lockdown imposed in April 2020 (CMIE, 2020). The earnings of self-employed and small business owners have also been affected adversely during the pandemic. According to a study conducted by the OECD, the COVID pandemic has put small and medium-sized enterprises (SMEs) at high risk of bankruptcy due to the impact on their income. The All-India Manufacturers' Organisation conducted a survey, revealing that 70% of SMEs in India faced a revenue decline ranging from 20% to 50% during the pandemic. The survey also indicated a decline in the labour participation rate from 42.7% in February 2020 to 35.6% in April 2020. The study governed by CII observed that the aviation, hospitality, and tourism sectors were the worst hit by the pandemic, with a significant decline in revenue and job losses (CII, 2020). Another study by the Indian ICRIER highlighted the impact of the pandemic on the informal sector in India, where a large percentage of workers lost their jobs and income due to the lockdown (ICRIER, 2020). As per the results of the study undertaken by Azim Premji University, households had to cut down on expenses and dip into their savings to cope with the income loss (Azim Premji University, 2020).

Based on the collective findings of various studies and reports, it is evident that the income of earning populations in both the formal and informal sectors has been significantly impacted by the COVID pandemic. As such, there is a pressing need to conduct a targeted investigation to discern the impact of the COVID pandemic on different income slabs and employment sectors like government sector, private sector, business, professionals & informal sector.

RESEARCH METHODOLOGY

Study Area

To examine the impact of the COVID pandemic on the income levels of the general population in Jaipur, a research project was conducted. The study included 211 individuals from various occupations and income groups to provide an all-encompassing understanding of the pandemic's impact on income across diverse backgrounds and occupations.

Research design

Several studies have already explored the diverse impacts of the COVID pandemic in India and globally. In this study, data was collected in a non-interventional manner to accurately depict the impact of COVID on the income of the general population in Jaipur. As such, a descriptive research design was employed, where a self-administered questionnaire-based survey was utilized to evaluate the effects of the pandemic on income levels. The survey was designed to be non-invasive and did not involve any interference or intervention from the researchers to ensure that the results reflected an accurate representation of the participants' experiences.

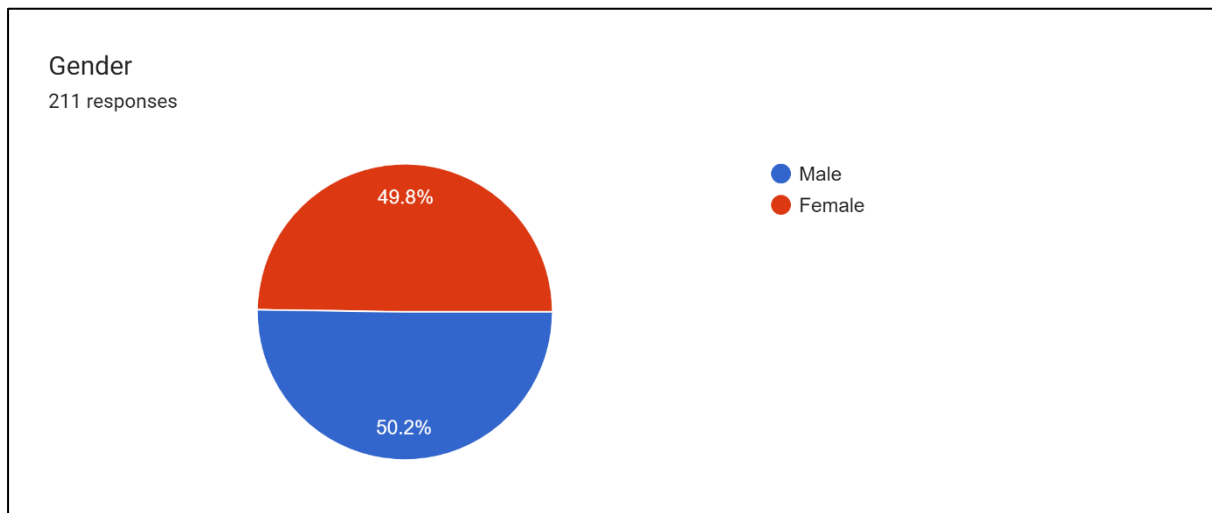
Sampling and data analysis

The study utilized a random sampling technique to collect data for analysis. A total of 211 respondents from various occupational backgrounds residing in Jaipur between the ages of 20 to 70 were selected as the study sample. The questionnaire consisted of 11 questions with the

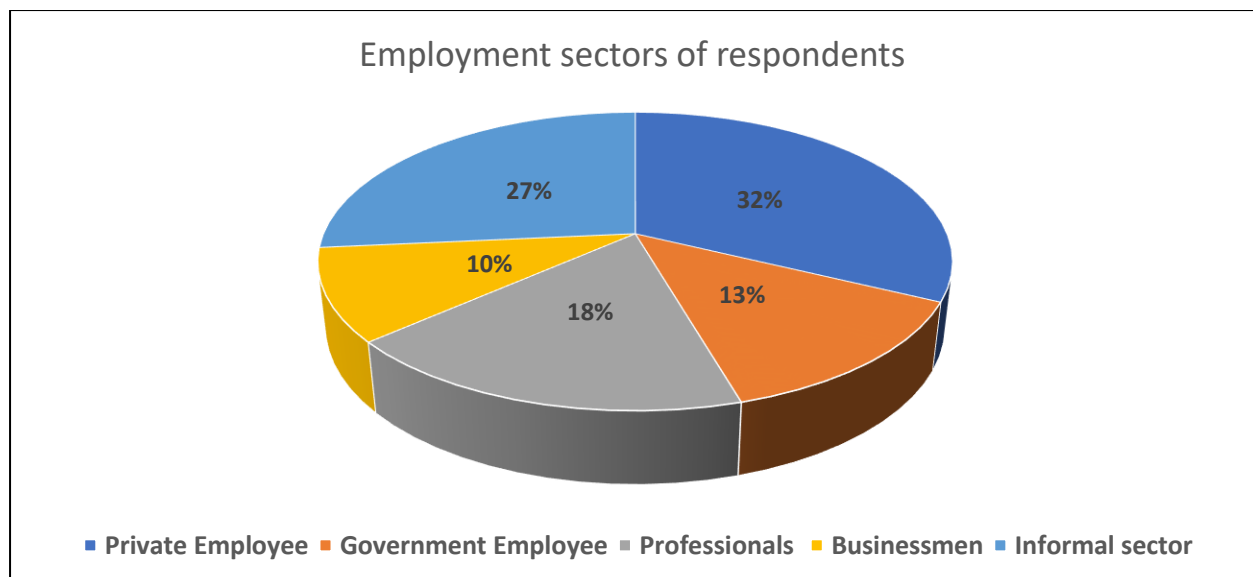
first section focusing on basic respondent information. The second part inquired about the impact of COVID on income, while the final section requested a detailed description of the specific impact felt. A Google form was employed to design the questionnaire and distribute it to all respondents via email. Data collection took place over two months, spanning from January 2023 to March 2023. The collected data were analysed using SPSS software, and a chi-square test was employed to examine the relationships between different variables.

RESULTS

The following findings are discovered by the research.

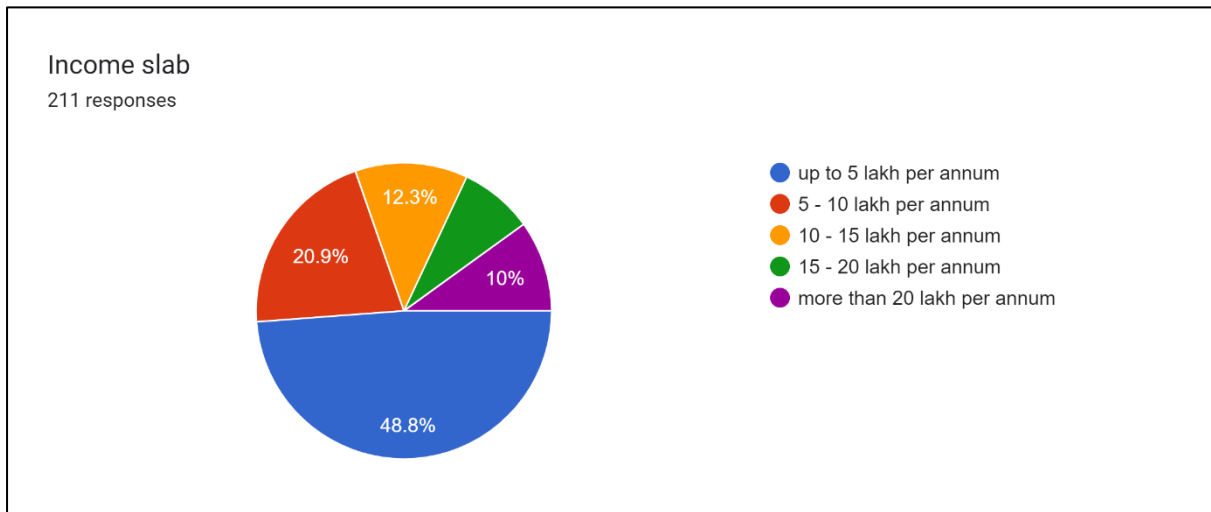


A total of 211 responses were received, among these, 106 individuals identified as male, while 105 individuals identified as female which highlighted a nearly equal representation of both genders.

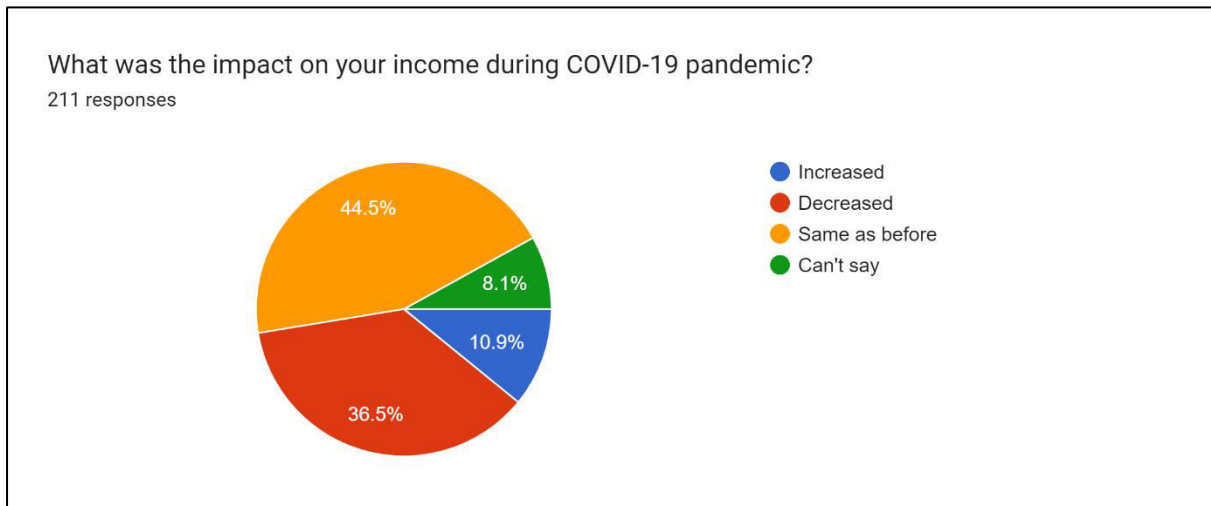


Responses were received from diverse sectors. Among the total number of respondents, 32.2% belonged to the private sector as employees, while 13.3% were government employees, underlined the significant presence of individuals from both sectors. Moreover, 18% of the respondents were professionals. It is

noteworthy that 10% of the respondents were businessmen and the remainder 26.5% of the respondents were individuals working in informal sectors. The informal sector includes – Handicraft workers, contractual workers, Musicians, ASHA workers, Research scholars, and Housewives doing work from home.



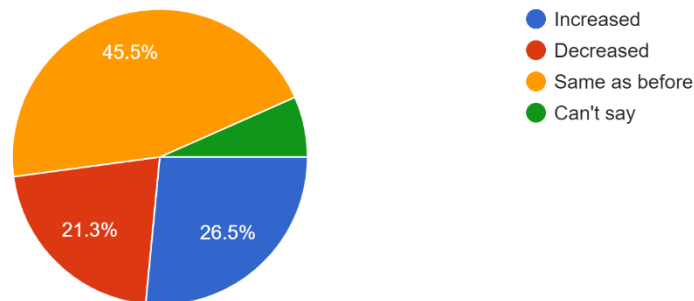
A notable fragment of participants, representing 48.8%, reported an income of up to 5 lakhs. Additionally, 20.9% of responses were from the 5-10 lakh income group, while 12.3% of participants turned up from the income slab of 10-15 lakhs. Furthermore, 8.1% of respondents reported earning between 15-20 lakhs, leaving the remaining 10% of respondents from the group with an income exceeding 20 lakhs.



Analysis of the responses received has revealed that 36.5% of participants reported a decrease in their income during COVID. On the other hand, 44.5% declared no change in their income, and unexpectedly 10.9% reported an increase in their earnings despite the challenges posed by the pandemic. It is conspicuous that a small percentage (8.1%) of participants were unable to comment on the impact of COVID on their income.

What was the impact on your income after COVID-19 pandemic? (In comparison to before COVID time income)

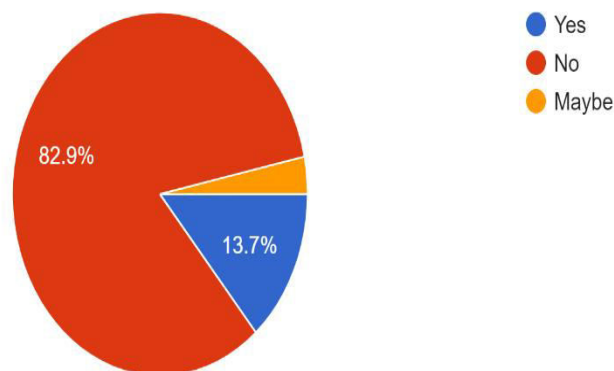
211 responses



Respondents were asked to compare their pre and post-pandemic income. Based on the data gathered, it has been revealed that following the subsidence of the COVID pandemic, 21.3% of respondents reported a decrease in their income. On the other hand, 45.5% of respondents reported no significant change in their income, while 26.5% reported an increase. A small percentage of 6.7% were unable to comment on the impact of COVID on their income.

Have you changed your occupation due to COVID?

211 responses



The collected data indicates that amid the COVID pandemic, 13.7% of the respondents experienced a change in their employment status attributable to the pandemic, while a significant majority of 82.9% reported no such changes. It is noteworthy that a mere 3.7% of the respondents reported having changed their job but were uncertain if it was due to the pandemic. These findings suggest that the pandemic has affected individuals' employment situations to varying degrees.

Occupation V/S Impact On Income During Covid

Crosstab							
		Occupation					Total
		Private Employee	Government Employee	Professional	Business	Informal Sector	
Increased	Count	7	1	13	2	0	23
	% within During Covid	30.4%	4.3%	56.5%	8.7%	0.0%	100.0%
	% within Occupation	9.9%	3.3%	34.2%	9.5%	0.0%	10.9%
	% of Total	3.3%	0.5%	6.2%	0.9%	0.0%	10.9%
Decreased	Count	32	3	11	15	16	77
	% within During Covid	41.6%	3.9%	14.3%	19.5%	20.8%	100.0%
	% within Occupation	45.1%	10.0%	28.9%	71.4%	31.4%	36.5%
	% of Total	15.2%	1.4%	5.2%	7.1%	7.6%	36.5%
Same as before	Count	27	24	14	1	28	94
	% within During Covid	28.7%	25.5%	14.9%	1.1%	29.8%	100.0%
	% within Occupation	38.0%	80.0%	36.8%	4.8%	54.9%	44.5%
	% of Total	12.8%	11.4%	6.6%	0.5%	13.3%	44.5%
Can't say	Count	5	2	0	3	7	17
	% within During Covid	29.4%	11.8%	0.0%	17.6%	41.2%	100.0%
	% within Occupation	7.0%	6.7%	0.0%	14.3%	13.7%	8.1%
	% of Total	2.4%	0.9%	0.0%	1.4%	3.3%	8.1%
Total	Count	71	30	38	21	51	211
	% within During Covid	33.6%	14.2%	18.0%	10.0%	24.2%	100.0%
	% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	33.6%	14.2%	18.0%	10.0%	24.2%	100.0%

Source-Primary Questionnaire Data
SPSS Statistical Tool

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	65.975 ^a	12	.000
Likelihood Ratio	71.633	12	.000
N of Valid Cases	211		

a. 7 cells (35.0%) have an expected count of less than 5. The minimum expected count is 1.69.

Source-Primary Questionnaire Data
SPSS Statistical Tool

The crosstab presents data on the impact of COVID on income during the pandemic, categorized by occupation. The data is presented in terms of the count and percentage of respondents who reported an increase, decrease, or no change in income during COVID, as well as those who couldn't estimate any impact. The total number of respondents is 211, which includes private employees, government employees, professionals, business owners, and those in the informal sector.

Looking at the data, we can see that during COVID, the highest percentage of respondents who reported an increase in income were in the professional category (56.5%), followed by private employees (30.4%), government employees (4.3%), and business owners (8.7%). No respondents in the informal sector reported an increase in income. On the other hand, the highest percentage of respondents who reported a decrease in income was in the informal sector (20.8%), followed by business owners (19.5%), private employees (41.6%), and government employees (3.9%). Professionals had the lowest percentage of respondents who reported a decrease in income (14.3%). In terms of those who reported no change in income during COVID, the highest percentage of respondents were in the informal sector (29.8%), followed by professionals (14.9%), government employees (25.5%), private employees (28.7%), and business owners (1.1%).

Based on the results of the Chi-Square tests, there is a statistically significant correlation ($p < .001$) between occupation and the impact on income during the COVID-19 pandemic.

Occupation V/S Impact on Income After Covid

		Crosstab					Total
		Occupation					
		Private Employee	Government Employee	Professional	Business	Informal Sector	
Increased	Count	28	7	17	2	2	56
	% within After Covid	50.0%	12.5%	30.4%	3.6%	3.6%	100.0%
	% within Occupation	39.4%	23.3%	44.7%	9.5%	3.9%	26.5%
	% of Total	13.3%	3.3%	8.1%	0.9%	0.9%	26.5%
Decreased	Count	15	2	5	14	9	45
	% within After Covid	33.3%	4.4%	11.1%	31.1%	20.0%	100.0%
	% within Occupation	21.1%	6.7%	13.2%	66.7%	17.6%	21.3%
	% of Total	7.1%	0.9%	2.4%	6.6%	4.3%	21.3%
Same as before	Count	24	21	16	3	32	96
	% within After Covid	25.0%	21.9%	16.7%	3.1%	33.3%	100.0%
	% within Occupation	33.8%	70.0%	42.1%	14.3%	62.7%	45.5%
	% of Total	11.4%	10.0%	7.6%	1.4%	15.2%	45.5%
Can't say	Count	4	0	0	2	8	14
	% within After Covid	28.6%	0.0%	0.0%	14.3%	57.1%	100.0%
	% within Occupation	5.6%	0.0%	0.0%	9.5%	15.7%	6.6%
	% of Total	1.9%	0.0%	0.0%	0.9%	3.8%	6.6%
Total	Count	71	30	38	21	51	211
	% within After Covid	33.6%	14.2%	18.0%	10.0%	24.2%	100.0%
	% within Occupation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	33.6%	14.2%	18.0%	10.0%	24.2%	100.0%

Source-Primary Questionnaire Data SPSS Statistical Tool

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	71.408 ^a	12	.000
Likelihood Ratio	73.996	12	.000
N of Valid Cases	211		

a. 6 cells (30.0%) have an expected count of less than 5. The minimum expected count is 1.39.

Source-Primary Questionnaire Data
SPSS Statistical Tool

The crosstab above shows the relationship between occupation and the impact on income after the COVID pandemic. The table is organized by occupation categories, including private employees, government employees, professionals, business owners, and workers in the informal sector. The rows represent the changes in income (increased, decreased, same, or can't say), and the columns represent the total count and percentages for each occupation group.

From the table, we can see that the highest percentage of people who reported an increase in income after the COVID pandemic was in the professional category, with 30.4% reporting an increase. However, the highest percentage of people who reported a decrease in income was in the business owner category, with 31.1% reporting a decrease.

According to the Chi-Square tests, there is a noteworthy correlation ($p < .001$) between occupation and the impact on income following the COVID-19 pandemic, suggesting that occupation contributes to determining the pandemic's effect on income.

Income Slab V/S Impact on Income During Covid

Crosstab							
		Income					Total
		up to 5 lakhs per annum	5 - 10 lakhs per annum	10 - 15 lakhs per annum	15 - 20 lakhs per annum	more than 20 lakhs per annum	
Increased	Count	4	6	4	4	5	23
	% within During Covid	17.4%	26.1%	17.4%	17.4%	21.7%	100.0%
	% within Income	3.9%	13.6%	15.4%	23.5%	23.8%	10.9%
	% of Total	1.9%	2.8%	1.9%	1.9%	2.4%	10.9%
Decreased	Count	48	16	3	8	2	77
	% within During Covid	62.3%	20.8%	3.9%	10.4%	2.6%	100.0%
	% within Income	46.6%	36.4%	11.5%	47.1%	9.5%	36.5%
	% of Total	22.7%	7.6%	1.4%	3.8%	0.9%	36.5%
Same as before	Count	41	17	19	3	14	94
	% within During Covid	43.6%	18.1%	20.2%	3.2%	14.9%	100.0%
	% within Income	39.8%	38.6%	73.1%	17.6%	66.7%	44.5%
	% of Total	19.4%	8.1%	9.0%	1.4%	6.6%	44.5%
Can't say	Count	10	5	0	2	0	17
	% within During Covid	58.8%	29.4%	0.0%	11.8%	0.0%	100.0%
	% within Income	9.7%	11.4%	0.0%	11.8%	0.0%	8.1%
	% of Total	4.7%	2.4%	0.0%	0.9%	0.0%	8.1%
Total	Count	103	44	26	17	21	211
	% within During Covid	48.8%	20.9%	12.3%	8.1%	10.0%	100.0%
	% within Income	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	48.8%	20.9%	12.3%	8.1%	10.0%	100.0%

Source-Primary Questionnaire Data
SPSS Statistical Tool

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38.864 ^a	12	.000
Likelihood Ratio	45.448	12	.000
N of Valid Cases	211		

a. 8 cells (40.0%) have an expected count of less than 5. The minimum expected count is 1.37.

Source-Primary Questionnaire Data
SPSS Statistical Tool

The given data presents the impact on income during COVID of individuals across different income slabs. The crosstab table shows the count and percentage distribution of individuals whose income has increased, decreased, remained the same, or cannot say during COVID, for each income slab.

The majority of individuals in all income slabs experienced a decrease in their income during COVID, as indicated by the high count and percentage of the 'Decreased' category for all income slabs. However, the percentage of the 'Increased' category is relatively higher for the income slab of 5-10 lakh per annum and more than 20 lacks per annum.

Further analysis of the data is done through chi-square tests, which indicate a significant association between the income slab and the impact of COVID on income ($p < .001$). This finding suggests that the impact of COVID on income varies across different income slabs.

Income Slab V/S Impact On Income After Covid

		Crosstab					Total
		Income					
		up to 5 lakhs per annum	5 - 10 lakh per annum	10 - 15 lakh per annum	15 - 20 lakh per annum	more than 20 lakhs per annum	
Increased	Count	14	17	7	9	9	56
	% within After Covid	25.0%	30.4%	12.5%	16.1%	16.1%	100.0%
	% within Income	13.6%	38.6%	26.9%	52.9%	42.9%	26.5%
	% of Total	6.6%	8.1%	3.3%	4.3%	4.3%	26.5%
Decreased	Count	31	7	2	3	2	45
	% within After Covid	68.9%	15.6%	4.4%	6.7%	4.4%	100.0%
	% within Income	30.1%	15.9%	7.7%	17.6%	9.5%	21.3%
	% of Total	14.7%	3.3%	0.9%	1.4%	0.9%	21.3%
Same as before	Count	47	18	17	4	10	96
	% within After Covid	49.0%	18.8%	17.7%	4.2%	10.4%	100.0%
	% within Income	45.6%	40.9%	65.4%	23.5%	47.6%	45.5%
	% of Total	22.3%	8.5%	8.1%	1.9%	4.7%	45.5%
Can't say	Count	11	2	0	1	0	14
	% within After Covid	78.6%	14.3%	0.0%	7.1%	0.0%	100.0%
	% within Income	10.7%	4.5%	0.0%	5.9%	0.0%	6.6%
	% of Total	5.2%	0.9%	0.0%	0.5%	0.0%	6.6%
Total	Count	103	44	26	17	21	211
	% within After Covid	48.8%	20.9%	12.3%	8.1%	10.0%	100.0%
	% within Income	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	48.8%	20.9%	12.3%	8.1%	10.0%	100.0%

Source-Primary Questionnaire Data
SPSS Statistical Tool

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	33.821 ^a	12	.001
Likelihood Ratio	37.231	12	.000
N of Valid Cases	211		
a. 7 cells (35.0%) have an expected count of less than 5. The minimum expected count is 1.13.			
Source-Primary Questionnaire Data SPSS Statistical Tool			

The crosstab shows the impact on earnings after COVID on the general population across different income slabs. Out of the total sample size of 211, 48.8% reported that their income remained the same as before COVID, while 33.9% reported a decrease in their income, and 17.3% reported an increase in their income. However, when looking at the different income slabs, the findings are more nuanced.

For those in the lowest income slab (up to 5 lakhs per annum), 68.9% reported a decrease in their income after COVID, while only 25% reported an increase. In contrast, those in the highest income slab (more than 20 lakhs per annum) had more individuals reporting an increase in their income (16.1%) than a decrease (4.4%).

The chi-square tests indicate that there is a statistically significant relationship between income slab and impact on income after COVID ($p < .001$). However, it is important to note that 7 cells (35.0%) have an expected count of less than 5, which is the minimum recommended threshold for valid analysis.

The participants were asked to provide a detailed explanation of how the COVID pandemic has affected their income and work patterns. The findings revealed that the impact on different occupations was diverse and multifaceted.

Healthcare workers, who have been at the forefront of the pandemic, have experienced an increased workload and a higher risk of exposure to the virus. They have also reported elevated levels of stress and burnout. While the income of regular staff was not affected, those who were contractual or incentive-based, such as ASHA workers, experienced fluctuating income during the pandemic.

Retail workers, particularly those in essential businesses like grocery stores, have encountered a greater demand for their services but have also faced a heightened risk of exposure to the virus. However, non-essential retailers suffered significant losses in business.

Education workers, including teachers and professors, had to adapt to new teaching methods and technologies to deliver remote education. Private education sectors also experienced a decrease in income due to delayed fee payments.

Service workers in industries such as hospitality and entertainment have been significantly affected by the pandemic, with many businesses shutting down or reducing operations. This has resulted in job losses or reduced working hours and income.

Office workers had to adjust to working from home, which presented challenges, including a lack of social interaction and difficulty in balancing work and personal life. Some industries, such as finance and technology, were better equipped to adapt to remote work and were not affected in terms of earnings during the pandemic.

The COVID-19 pandemic has significantly affected work patterns and income for numerous individuals and households on a global scale. The effects on different occupations have been diverse and intricate, with some experiencing increased demand and others confronting significant challenges and disruption.

SUGGESTIONS AND RECOMMENDATIONS

The study findings suggest that policymakers should implement measures to provide financial relief to those who have been adversely affected by the pandemic. These measures include income support, unemployment benefits, and rental assistance. Furthermore, essential workers, such as healthcare and retail workers, should be adequately compensated for the risks and challenges they face in their jobs, including hazard pay, personal protective equipment, and mental health support.

The study also recommends investing in education and training programs to equip individuals with the skills necessary to adapt to new and emerging job opportunities. This can help mitigate the long-term impact of the pandemic on income levels by ensuring that individuals can remain competitive in a rapidly evolving job market. Additionally, promoting and supporting small businesses, which have been particularly hard hit by the pandemic, is crucial. This includes providing financial assistance, reducing bureaucratic hurdles, and encouraging consumer spending in local economies.

Finally, policymakers should recognize that the impact of the pandemic on income levels has been unevenly distributed across different demographics. Therefore, policy responses must be tailored to address the specific needs of different groups. By implementing these measures, policymakers can help alleviate the financial burden faced by many individuals and households, ensuring a more equitable and sustainable recovery from the pandemic. The study findings serve as a valuable resource for policymakers and stakeholders seeking to design effective and equitable policy responses.

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