

Impact of epidemics and pandemics on consumption pattern: evidence from Covid-19 pandemic in rural-urban India

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Abstract

Purpose – The present world is crippled with the pandemic coronavirus (Covid-19). The pandemic that originated in Wuhan city of China has sent every country in the world in an unprecedented situation that has social and economic impacts. This paper aims to explore whether epidemics and pandemics have any impact on consumption patterns among rural and urban consumers in India. Taking pandemic Covid-19 as a case study, it was explored how this pandemic impacted the consumption pattern of consumers in India; what are the similarities and/or differences between rural and urban consumers that are found in their consumption habits in the wake of Covid-19 pandemic.

Design/methodology/approach – The required data was collected through questionnaires sent to respondents. Approximately 500 respondents were contacted through the mail to fill in the survey questionnaire. Despite the sincere efforts, a total of 175 complete survey questionnaires were filled in by respondents. The study used SPSS Statistics version 25 software for the analysis of data.

Findings – It was found that epidemics and pandemics have a profound impact on the pattern of consumption in India. The study reveals that consumers resort to panic buying in the initial stages of epidemics and pandemics. It was found that consumption habits of consumers went a sea change and they were spending largely on essentials only. The study also reveals that the majority of consumers would like to continue in the same consumption habits as that of during COVID-19. The consumption pattern of urban consumers witnessed more change than the consumption pattern of rural consumers. It is due to the closure of eateries and restaurants, shopping malls, movie theatres, etc., in urban areas that forced the change in the consumption pattern of urban consumers.

Research limitations/implications – The research has a limitation of using a less sample size. For the generalizations, more robust studies can be conducted with more data.

Practical implications – The findings of the study will give marketers an insight for framing their policies in the wake of epidemics and pandemics.

Originality/value – The research adds to the existing body of knowledge. There are plenty of studies on the behaviour of consumers. However, there are no major studies that focus on the behaviour of consumers during the outbreak of a pandemic. So, this study fills this gap in the existing body of knowledge.

Keywords Epidemics, Pandemics, COVID-19, Consumption habits, Rural-urban India

Paper type Research paper



1. Introduction

Countries around the world are experiencing one of the worst times. The novel coronavirus disease 2019 (COVID-19) has created a big challenge for the world. It has forced the countries to observe lockdown whether partly or in full for some time, which is having huge economic implications. Factories are shut, manufacturing is stalled, offices are working virtually, millions of people have lost their jobs, countries are experiencing financial crises apart from the loss of lives due to COVID-19. Whether developed, developing or underdeveloped countries, every economy is finding it difficult to fight COVID-19. Every day, lakhs of people are getting infected with COVID-19 and thousands of people are losing their lives daily due to this pandemic. The major reason for this death toll is the non-availability of any medical cure against COVID-19. There is no scientifically approved medicine yet that can cure patients of COVID-19.

The outbreak of COVID-19 has created a huge economic challenge for the world economy. Governments to prevent the spread of COVID-19 in their respective countries have adopted social distancing and imposed lockdown. The imposition of lockdown is costing countries economically as there are no economic activities going on. There are proven and credible evidence from the globe that the spread of epidemics and pandemics does create an economic challenge. Then, many economists have also estimated the economic loss due to epidemics and pandemics worldwide. For example, [Garret \(2007\)](#) study the economic effects of 1918 influenza on the US economy; [Bloom and Canning \(2006\)](#) globally study the links between infectious disease epidemics and income and see how these links are affected by changing global circumstances; [Karlsson *et al.* \(2013\)](#) study the impact of 1918 influenza on Sweden; [Dixon *et al.* \(2002\)](#) analyse the impact of HIV AIDS on the economic development of Africa; [McKibbin and Sidorenko \(2006\)](#) analyse the global macroeconomic consequences of pandemics influenza. These studies do prove that epidemics or pandemics do have economic implications. For example, [Dixon *et al.* \(2002\)](#) found in their study that due to the HIV AIDS pandemic the growth rate in Africa went down by 2–4% a year. Many authors and economists such as [Jonas \(2013\)](#) and [Fan *et al.* \(2016\)](#) had even cautioned the world against the economic consequences of epidemics and pandemics. [Fan *et al.* \(2016\)](#) predicted that even a moderately severe pandemic can lead to 2 million or excess deaths globally. The authors calculate that the cost of fighting pandemic influenza falls in the same range (0.2–2% of global income) as does that of climate change although towards the low end. However, it seems that the countries have not learned anything from past pandemics otherwise they would not have suffered so much as seen in the wake of COVID-19 pandemic.

The estimated loss to the world economy due to COVID-19 is USD 8.8tn in the financial year 2020–2021 and this loss has been forecast to USD 90tn over the next five years. The World Economic Forum has predicted that the global GDP growth rate is going to shrink to around 2% in the financial year 2020–2021, which is the worst low only after the global financial crisis of 2008–2009. The gravity of the economic crisis caused by COVID-19 can be understood by the fact that many countries are predicted to experience a –5 to –10% rate of economic growth during the financial year 2020–2021.

Present paper is an attempt to analyse the impact of the COVID-19 pandemic on consumer behaviour and their consumption pattern in India. The motivation behind the study is that there are lots of studies on epidemics and pandemics that focus on the economic impacts of pandemics, as well as epidemics. However, there are no major studies that can gauge the psyche of consumers during any pandemic. This area of consumer behaviour during an epidemic and pandemic has been left over by the researchers. So, we try to fill out this research gap.

We have divided the paper into the following sections or parts. Section 1 introduces the topic and gives a brief introduction of it along with explaining the general outline of the paper. We review the relevant literature in Section 2 of the paper and try to find out the research gap through it. Based on the review of literature in Section 2, we identify our research objectives that are given in Section 3. Section 4 describes the research methodology adopted for the paper wherein a detailed description of methods of data collection, data analysis and presentation is given. The analysis of data and presentation of it is given in Section 5. Section 5 also discusses the findings of the paper. Section 6 concludes the findings and lists out the recommendations for tapping the markets during an epidemic and pandemic. The last section of the paper, Section 7, lists out the references used for the paper.

2. Literature review

The spread of COVID-19 has changed the way people interacted with each other, greeted each other, the way worked and the way they bought goods and services. All the things have gone a sea change. The imposition of social distancing and home quarantine has led to a reduction in the number of COVID-19 cases but it is also creating psychological distress among people. The economies around the world have been paying heavy losses due to epidemics and pandemics. [Jonas \(2013\)](#) examined the risk of pandemics on the development of a country. The author finds that the cost of a pandemic is so high that a single pandemic of severe nature can cost USD 3tn. The author compares the impact of a pandemic to that of absolute poverty in a developing country and concludes that it can have a devastating impact as absolute poverty could have. OECD, among others, see a severe pandemic as a top global catastrophic risk, ([Jonas, 2013](#)), which simply highlights the fear of a pandemic among people. Pandemic will bring nothing except misery, economic decline and societal disruptions on a global scale, which will hardly impact the poor and those in fragile states, the author concluded.

In line with the findings of [Jonas \(2013\)](#) is the finding of [Fan et al. \(2016\)](#), who estimated the cost of a pandemic that is needed to fight the pandemic. Authors found that the cost of a pandemic is equal to the cost of climate change. It means that the cost of fighting a pandemic worldwide is so high that the world can fight climate change at the same cost. The authors also warned that the world is going to witness a severe pandemic like that of influenza of 1918 as the world has learned nothing from the past and has shown little interest in preparing for any pandemic. This finding is in line with the finding of [Bloom and Canning \(2006\)](#), who warned that the USA has not learned from recent pandemics and was ready for another tragedy. Estimates of mortality cost as a percentage of GNI worldwide would range from 0.3% to 1.6% of GNI of high income to lower-middle-income countries, respectively ([Fan et al., 2016](#)).

[Sands et al. \(2016\)](#) analysed the economic vulnerability to infectious disease crises and argued why the world may again witness a wide-scale pandemic. Authors found that the underestimation of crises of infectious diseases to human lives and livelihoods is the main reason for less investment in preparedness and response to infectious disease outbreaks. Authors concluded that infectious disease crises have substantial economic impacts.

[World Economic Forum \(2018\)](#) finds in its report that the annual cost of pandemic influenza is comparable with that of climate change. Notably, most economic losses are not typically caused by the disease directly, but rather by relatively predictable consumer reactions, labour shortages and cascading failures in the economic and financial sectors.

[Orset \(2018\)](#) examine people's perception and cost-effectiveness of home confinement during an influenza pandemic. The author finds that the imposition of home confinement depends on the level of people's cooperation, if people decide not to participate voluntarily

then home confinement cannot be implemented successfully. Moreover, home confinement is dependent on an individual's age, income, household consumption, professional group, interaction with an infected person and medical assistance. The study concludes that when people are more likely to become contaminated or contaminate others, they are less likely to comply with the home confinement rules.

[Baker et al. \(2020\)](#) found an inverse relationship between social distancing and level of spending, pandemics and epidemics do have an impact on consumption patterns, and thus, consumer behaviour.

[Chen et al. \(2020\)](#) analyse the impact of the COVID-19 pandemic on consumption in China. The study was conducted using daily transaction data of 214 cities. The study reveals that daily offline consumption in China fell by 32% during the 12 week period i.e. late January to early April 2020. Spending on goods and services was reported to have decreased by 33% and 34%, respectively. The hardest hit were dining out and entertainment and travel that saw a dip of 64% and 59%, respectively. Wuhan, where COVID-19 originated, saw the largest dip in consumption that was to the tune of 70%. The study concludes that consumption responded negatively to the day-to-day changes in epidemic severity, which caused the offline consumption in China to see a dip of 1.2% of China's GDP in 2019.

[Bounie et al. \(2020\)](#) examine the changes in the behaviour of consumers during COVID-19 in France. The study finds that consumers switch over to online shopping options that mitigated the overall impact of the shock.

[Surico et al. \(2020\)](#) analyse the consumption pattern based on transaction data in the UK. The study finds that consumers stockpiled essential goods like groceries in the initial phases of lockdown. Further, the start of the lockdown measures saw a significant 15% increase in cash holding, which continued till April and was 20% at the end of April. The study finds that large expenditure changes were seen in services; retail expenses such as clothing, shoes, apparel, toys and book purchases fell after the first week of March. Travel expenses were hard hit and recreation expenses also declined throughout March and continued till April.

[Chronopoulos et al. \(2020\)](#) find that the COVID-19 and public health interventions instituted by the UK government are having significant effects on the level and composition of consumer spending across great Britain. The authors find that the declaration of COVID-19 as a pandemic on March 11, 2020, caused the Britishers to increase spending on groceries, which led to stockpiling by consumers. The concludes that male, older and higher-income individuals spend significantly more in all spending categories compared to female, younger and lower-income counterparts.

[Muellbauer \(2020\)](#) predicts the fall in consumer spending caused by a decrease in household incomes. The author predicts that if the household income falls by 16% then the consumer spending would fall by 20%. The author lists out the reason for this scenario. The first reason is that part of the negative shock originates in the disruption to consumption itself. The second reason is the income insecurity arising from the unprecedented rise in the unemployment rate. Then, the other reasons being the fall in asset prices and a sharp contraction in credit availability ([Muellbauer, 2020](#)). The outlook for US consumption and the economy appears far grimmer than at any time in the 2008 global financial crisis ([Muellbauer, 2020](#)).

A study conducted by [IBM \(2020\)](#) in the month of April shows that the pandemic COVID-19 has more impact on consumers' personal mobility, retail shopping and event attendance. As per the study, the majority of the respondents indicated that they would reduce or forego the use of public transportation which may create demand for personal vehicles. However, the financial crisis posed by COVID-19 will not allow consumers to make purchases. The study

concludes that COVID-19 is permanently altering the US consumer behaviour and the long-term implications are there for industries such as retail, transportation and travel.

Similar to the study of [IBM \(2020\)](#) is the study of [Accenture \(2020\)](#) that finds that consumer priorities have become centred on the most basic needs, sending the demand for hygiene, cleaning and staples products soaring while non-essential categories slump. The study finds the use of digital commerce increasing which is expected to sustain post-COVID-19. Priorities of consumers are conscious consumption, health and safety, the love for local and the consumers are shopping efficiently, the study concludes.

A survey conducted by [McKinsey and Company \(2020\)](#) finds the long term impact of COVID-19 on consumers. Consumers in the survey responded that not only COVID-19 changed their consumption behaviour but it has also impacted their personal life, their daily routines. Consumers are spending essentials only and non-discretionary categories due to a decrease in incomes, the study concludes that consumers have shifted towards online and digital solutions, as well as reduced contact channels to get goods and services.

[Sheth \(2020\)](#) examines the impact of the COVID-19 pandemic on consumer behaviour and finds eight immediate impacts of COVID-19 that are hoarding, improvisation, pent-up demand, embracing digital technology, blurring of work-life boundaries, store to home, reunions with family and friends and discovery of talent. The study reveals that there will be definitely a change in the habits of consumers, however, habits will not die, they will return and a new opportunity for marketers will open. Further, COVID has increased the use of social media on Facebook, Instagram, WhatsApp, Twitter and Zoom that has been generating an enormous amount of word of mouth. The need is to further in technology to gauge consumer psyche, the author finds. The study concludes that changing demographics, public policy and technology are major forces in developing new habits, as well as giving up old habits.

The impact of COVID-19 is many folds. It has not only impacted the consumers and consumption patterns but also has impacts on economic, social, environmental and cultural aspects too. Studies have been conducted to assess the level of these impacts. [Chakraborty and Maity \(2020\)](#) analyse the impact of Covid-19 on migration, society and the global environment. Authors find that due to COVID-19 there will be an approximate loss of 2% points for each month in annual GDP growth. The hardest-hit sector is tourism that has faced an output decline of 50 to 70%. As far as the impact of COVID-19 on the environment is concerned, it is proved to be beneficial as the closure of industries, factories, etc., has led to the decrease in waste emissions which has created a very positive impact on the world environment. The ecosystems are greatly recovered.

As far as the impact of COVID-19 on the environment is concerned, similar results to [Chakraborty and Maity \(2020\)](#) have been found by various studies. [Saeida et al. \(2020\)](#) found that the closure of economic activities during lockdown caused air quality to improve in many cities across the globe; [Zambrano-Monserrate et al. \(2020\)](#) also find similar results to that of [Saeida et al. \(2020\)](#). [Sharma et al. \(2020\)](#) find a positive impact of COVID-19 on the environment in India, especially in the context of air quality. The study reveals that there was a 17% increase in O₃ (Ozone layer) and negligible changes in SO₂. The study concludes that during the lockdown period in India, there was 44%, 33%, 29%, 15% and 32% reduction in Air Quality Index (AQI) in north, south, east, central and western India, respectively, which is confirmation that air quality improved during the lockdown.

[Ali and Alharbi \(2020\)](#) study the spread, management, treatment and social impact of COVID-19. The study concludes that the closure of economic activities around the globe has impacted the countries very badly, most hit travel and tourism sector. Authors express concerns over the closure of academic institutions that are creating a hurdle in imparting

quality education to students. Also, the lack of quality education will create an innumerable loss to the world in the long-run, authors find. The study concludes by emphasizing the need for the development of dedicated research centres and upgrade science and technology to further the fight against any such disaster in the time to come.

3. Research gap

The motivation behind the study is that there are lots of studies on epidemics and pandemics that focus on the economic impacts of pandemics, as well as epidemics. However, there are no major studies that can gauge the psyche of consumers during any pandemic. This area of consumer behaviour during an epidemic and pandemic has been left over by the researchers. So, we try to fill out this research gap. In addition to this, we also include rural consumers in our study for understanding their behaviour during an epidemic/pandemic. The very purpose of including rural consumers in the study is that researchers conducting research in the area of consumer behaviour generally focus on urban consumers, and thus, rural consumers are left. Thus, by including rural consumers in our study we try to give a holistic view of consumers' purchase patterns during an epidemic or a pandemic.

4. Objectives of the study

The present paper is an attempt to study the impact of the COVID-19 pandemic on consumption patterns in India. The major objectives of this paper are:

- To analyse the impact of the COVID-19 pandemic on consumption pattern in India.
- To know the differences or similarities between urban and rural consumers' behaviour during the COVID-19 pandemic.
- To analyse the preferences of consumers post COVID-19.
- To suggest appropriate strategies for marketers to tap the markets in any future epidemic/pandemic.

5. Research methodology

The research methodology for the paper was designed keeping in mind the authentic and accurate collection of data, analysis of data and interpretation of results. The data for the present study were collected through a mail questionnaire. Approximately 500 respondents were contacted through the mail to fill in the survey questionnaire. Despite the sincere efforts, a total of 175 complete survey questionnaires was filled in by respondents.

The data collected through survey questionnaires were analysed with the use of SPSS Statistics version 25 software. The analysis of data and interpretation of results are being discussed in the next discussion.

6. Analysis of data and discussion of results

This section analyses the data collected for research and interprets the results thereof.

6.1 Demographic profile of respondents

The demographic profile of the respondents is given in [Tables 1 to 8](#). Out of the total respondents, the majority is female respondents that constitute 77% ([Table 1](#)). The age group of most of the respondents was 18–25 years (68%), followed by 26–34 years (26%) ([Table 2](#)). This shows that most of the respondents were young adults.

Table 3 depicts the educational qualification of the respondents that clearly shows that most of the respondents surveyed in our questionnaire possessed a post-graduation qualification 36%, followed by a graduate degree i.e. 26%, 12th/Senior secondary qualification i.e. 24%. There were 13% of total respondents who had qualifications above a post-graduate degree.

Majority of the respondents were unemployed i.e. 60%, as shown in Table 4. Among employed, the similar percentage was engaged in government and private sector, 16.6% and 17.7%, respectively. There were only 5% among employed who were professionals. The nature of employment of respondents, as shown in Table 5, was equally distributed between full-time employment and contractual employment (both 16%). There were 8% among employed who were in part-time employment.

Table 1.
Gender of the
respondents

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
Female	135	77.1	77.1	77.1
Male	40	22.9	22.9	100.0
Total	175	100.0	100.0	

Table 2.
Age group (in years)
of the respondents

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
18-25	119	68.0	68.0	68.0
26-34	46	26.3	26.3	94.3
35-44	8	4.6	4.6	98.9
45-54	2	1.1	1.1	100.0
Total	175	100.0	100.0	

Table 3.
Educational
qualification

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
Above post graduate	22	12.6	12.6	12.6
Below 12th pass/senior secondary	1	0.6	0.6	13.1
Graduate	46	26.3	26.3	39.4
Post graduate	63	36.0	36.0	75.4
Senior secondary/12th pass	43	24.6	24.6	100.0
Total	175	100.0	100.0	

Table 4.
Occupation

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
Government sector employee	29	16.6	16.6	16.6
Private sector employee	31	17.7	17.7	34.3
Professional	1	0.6	0.6	34.9
Self-employed/businessperson	8	4.6	4.6	39.4
Unemployed	106	60.6	60.6	100.0
Total	175	100.0	100.0	

Table 6 shows the income group of the respondents. As far as the income of respondents is concerned, majority of them i.e. 68.6%, responded that it was earning less than Rs. 20,000 a month. There were 10% who earned more than Rs. 50,000 a month and almost an equal percentage, 9.1%, earned between Rs. 20,000 and Rs. 30,000 per month.

87% of respondents were unmarried, as far as the marital status of the respondents is concerned. The same has been shown in Table 7. Then, 86% of total respondents resided in an urban area, thereby 14% of respondents lived in rural areas (Table 8).

6.2 Impact of COVID-19 on consumption pattern

Out of the total respondents surveyed, more than 90% of respondents said that their spending habits have changed during COVID-19. The majority of them i.e. 60%, feels that consumption and spending habits have undergone a sea change during COVID-19. Approx a quarter i.e. 24%, of respondents, were neutral about change in their spending habits. In total, 7% of the respondents said that their spending habits did not change during COVID-19.

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
Contractual	28	16.0	16.0	16.0
Not applicable (if unemployed)	104	59.4	59.4	75.4
Part-time	14	8.0	8.0	83.4
Permanent/regular	29	16.6	16.6	100.0
Total	175	100.0	100.0	

Table 5.
Nature of
employment

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
20,000–30,000	16	9.1	9.1	9.1
30,001–40,000	14	8.0	8.0	17.1
40,001–50,000	8	4.6	4.6	21.7
Above 50,000	17	9.7	9.7	31.4
Less than 20,000	120	68.6	68.6	100.0
Total	175	100.0	100.0	

Table 6.
Monthly income in
Indian national
rupees (INR)

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
Married	22	12.6	12.6	12.6
Unmarried	153	87.4	87.4	100.0
Total	175	100.0	100.0	

Table 7.
Marital status

Demographic variable	Frequency	(%)	Valid (%)	Cumulative (%)
<i>Valid</i>				
Rural area	24	13.7	13.7	13.7
Urban area	151	86.3	86.3	100.0
Total	175	100.0	100.0	

Table 8.
Residential area of
respondents

73% of total respondents said that they are spending less during COVID-19, that is, their spending habits have gone down. On the other hand, 27% responded that they are spending more during COVID-19. The majority of the respondents, i.e. 81%, are spending on essentials during COVID-19. In total, 11% of them are spending on personal care products, 4% on paying EMIs, 2% on entertainment and the rest 2% spend on dining out. Also, COVID-19 has forced consumers to buy online.

As far as the changes in consumption habits are concerned during COVID-19, 54% of the respondents said that it has gone a sea change. In total, 28% said it did not have any impact on their consumption habits; 18% had no idea whether their consumption habits changed during COVID-19. Consumers have shifted their focus towards healthy products during COVID-19; they are taking immunity boosters during COVID-19.

As far as the change in consumption is concerned, the focus of consumers has shifted towards essential products (64% of surveyed consumers spending on it); followed by healthy products (38% of surveyed consumers). It is also surprising to know that 25% of surveyed consumers are spending on online education/skill upgradation. It must also be noted here that expenses on data packs have also increased during COVID-19 (70% of respondents reporting the same), which is the result of various online activities such as online education and online web series/movies watching of respondents.

COVID-19 has also an impact on the income of consumers. In total, 38% of the respondents surveyed reported that their income decreased by more than 40% due to COVID-19. In total, 27% responded that COVID-19 has no impact on their incomes, which is also a surprising finding. In total, 14% found that their income decreased by 20–30%; 13% reported a 30–40% decrease in income. This decrease in income of respondents has an impact on their ability to spend. In total, 27% of respondents said they were spending more than 30% less due to decreased income; 26% reported no impact of the decrease in income on spending ability; 16% reported that they were spending 20–30% less and an equal percentage of respondents that they were spending 10–20% less due to decrease in income.

The majority of the respondents, i.e. 65%, lost their job due to COVID-19. Respondents feel that COVID-19 will have a long-term impact on their consumption habits. Around 50% of the respondents feel that their consumption habits will be affected for more than 6 months due to COVID-19. Moreover, 25% of the total respondents feel that their consumption habits will change permanently due to COVID-19.

COVID-19 also forced respondents to go back to their respective hometowns. There were 20% such respondents. The main reason that forced respondents to take this step was fear of COVID-19 (44%), followed by a feeling of loneliness (35%) and loss of employment (15%). There were 6% of respondents who went to their hometowns because the facilities provided by the government were inadequate. The majority of the respondents (62%) have been in their hometown for more than 3 months; 23% stayed in their hometown for up to 1 month and 9% stayed in their hometown for 2 months. People who went to their hometown did not find employment in their hometown. In total, 80% of the respondents said that they would return to urban areas in search of employment post-COVID-19.

As far as the post-COVID-19 scenario is concerned, 64% of total respondents said that they would be spending on buying essentials even after COVID-19. In total, 55% of total respondents said that their priorities post COVID-19 is to save more; followed by earning more money i.e. 38%.

6.3 Economic impact of epidemics and pandemics

Epidemics and pandemics can have economic impacts far beyond the borders of their source countries and these potential impacts are often amplified by the aspects of the modern world that facilitate the spread of disease, facilitate tourism, trade, etc. The epidemics and

pandemics can also obstruct the growth of an economy by changing the expectations from an economy and by deterring investment and tourism, as we are witnessing today in the case of COVID-19.

Many economists analysed the economic impacts that an epidemic or a pandemic can have. For example, [Dixon *et al.* \(2002\)](#) examined the impact of the HIV/AIDS pandemic on the economic development of Africa and found a profound impact of the same on the economy of Africa. The pandemic reduced labour supply and productivity, reduced exports, increased imports across Africa. This pandemic affected Africa so badly that its growth rate of the economy went down by 2–4% per year. [Bloom and Canning \(2006\)](#) found that due to the outbreak of the SARS epidemic, the affected countries witnessed an economic slowdown. They found that the foreign direct investment in Hong Kong fell by 62% in one quarter due to the SARS outbreak in China. Many businesses were forced to shut and saw more than a 50% decline in revenue. The economic loss to the USA due to the SARS outbreak was to the tune of 11bn USD ([Bloom and Canning, 2006](#)). [Fan *et al.* \(2016\)](#), who estimated the cost of a pandemic that is needed to fight the pandemic. Authors found that the cost of a pandemic is equal to the cost of climate change. It means that the cost of fighting a pandemic worldwide is so high that the world can fight climate change at the same cost. The authors also warned that the world is going to witness a severe pandemic like that of influenza of 1918 as the world has learned nothing from the past and has shown little interest in preparing for any pandemic.

The above paragraphs show the devastating economic impact that can be done by the outbreak of epidemics and pandemics. We have seen in the present time of COVID-19 that this pandemic has created a huge economic loss to the world economy. The global growth rate of GDP for the financial year 2020–2021 has been predicted to be shrink to 2%; the economic loss has been predicted to the tune of USD 8tn in the financial year 2020–2021 and further, the loss is predicted to over USD 90tn over the next five years.

In the first quarter of the financial year 2020–2021, many countries have seen a negative growth rate of GDP. India saw a negative 23.9% growth rate of GDP in the very first quarter of the financial year 2020–2021 as compared to the same quarter of the previous year. This loss is the result of the nationwide lockdown that India has imposed to prevent the spread of COVID-19.

7. Conclusion

The basic objective of this paper was to study the changes in consumption patterns during COVID-19; to know the similarities or dissimilarities in behaviour of consumers in urban and rural areas and to suggest the appropriate strategies to tap the markets during any future epidemic/pandemic. Based on the discussions in the previous section, we come to the following conclusion:

- The behaviour of consumers gets changed during an epidemic or pandemic. Our results of COVID-19 as a case study prove this. We find in our paper a profound impact of COVID-19 on consumer behaviour in India, both urban and rural India.
- As far as the impact of COVID-19 on consumption patterns is concerned in India, it has a profound impact on consumption patterns. During COVID-19, the majority of consumers shifted their focus towards essential products only. Thus, during an epidemic or pandemic consumers consume essential products only. Also, consumers prefer healthy products/foods during an epidemic or pandemic.
- The pandemics like COVID-19 cause significant changes in the spending habits of consumers. We in our study find this point where more than 70% of respondents said that their spending habits went down due to COVID-19.

- Staying healthy is the preferred choice of consumers during pandemics.
- Online platforms, whether education, entertainment or social networking, have a huge possibility of success during an outbreak of epidemics/pandemics. Also, consumers use digital payment methods more during an epidemic than they do in a normal situation.
- Job loss, reduction of income, reduction in the capability to spend are some of the major impacts of pandemics. In our study, 65% of respondents lost their job due to COVID-19.
- Epidemics and pandemics have almost similar impacts on the behaviour of rural and urban consumers in India. However, the closure of eateries, cinema halls, recreation places in urban has more impact on consumers in urban areas.
- Fear of the spread of pandemics forces people to go to their hometowns. We find this phenomenon in our study. Also, people do have a willingness to return to urban areas in search of employment post-COVID-19.
- The impact of the COVID-19 pandemic is long-term with regard to consumer behaviour. Consumers also have a feeling that their consumption habits will change permanently due to COVID-19.

8. Recommendations

We make the following recommendations for marketers to tap the consumers during an epidemic or pandemic:

- Our study has revealed that consumers largely spend on essentials such as groceries and medicines. Thus, marketers should try to come out with such business models.
- There is a large scope of online platforms during an epidemic. Companies should try to go digital during the outbreak of pandemics, they need to invest in online platforms.
- The study reveals that consumers prefer to stay fit and healthy. It has also revealed that consumers use immunity boosters during pandemic COVID-19. Companies should try to add products in their product portfolio that are beneficial to health and improve immunity.
- The government should try to provide alternate employment opportunities to people who lost their job during a pandemic.
- The exodus of people from urban to rural areas has a negative impact on demand in urban areas. Due to the closure of eateries, restaurants alone there was a 25% reduction in demand for milk in urban areas that impacted the milk industry. The government should try to stop the exodus of people to prevent any unnecessary loss to any industry like that of the milk industry.

9. Contribution of the study to the existing body of knowledge

The motivation behind the study was that there were lots of studies on epidemics and pandemics that focus on the economic impacts of pandemics, as well as epidemics. However, there were no major studies that could gauge the psyche of consumers during any pandemic. This area of consumer behaviour during an epidemic and pandemic had been left over by

the researchers. So, we tried to fill in this research gap. In addition to this, we also included rural consumers in our study for understanding their behaviour during an epidemic/pandemic. The very purpose of including rural consumers in the study was that researchers generally leave rural consumers in conducting research. As our study finds that there is a difference in the behaviour of rural consumers with that of their urban counterparts. Both types of consumers differ in many aspects. For example, our study indicates that the consumption pattern of urban consumers witnessed more change than the consumption pattern of rural consumers. It is due to the closure of eateries and restaurants, shopping malls, movie theatres, etc., in urban areas that forced the change in the consumption patterns of urban consumers. Thus, by including rural consumers in our study we tried to give a holistic view of consumers' purchase patterns during an epidemic or a pandemic. The study also becomes more important in the wake of the fact that the past 2–3 decades have witnessed the emergence of rural markets in many countries including India. The very reason for the emergence of rural markets is the urban markets nearing their saturation levels. Also, a new consumer i.e. the rural youths, exhibiting the qualities of the urban consumer is emerging in rural markets. Thus, this study will give marketers an insight for framing their policies in the wake of epidemics and pandemics.

References

- Accenture (2020), available at: www.accenture.com/_acnmedia/PDF-123/Accenture-COVID19-Pulse-Survey-Research-PoV.pdf#zoom=40
- Ali, A. and Alharbi, M.L.O. (2020), "COVID-19: disease, management, treatment, and social impact", *Science of the Total Environment*, Vol. 728 No. 2020, doi: [10.1016/j.scitotenv.2020.138861](https://doi.org/10.1016/j.scitotenv.2020.138861).
- Baker, S.R., Farrokhnia, R.A., Meyer, S., Pagel, M. and Yannelis, C. (2020), "How does household spending respond to an epidemic? Consumption during the 2020 COVID-19 pandemic", available at: https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_202030.pdf
- Bloom, D.E. and Canning, D. (2006), "Epidemics and economics", available at: https://cdn1.sph.harvard.edu/wp-content/uploads/sites/1288/2013/10/BLOOM_CANNINGWP9.2006.pdf
- Bounie, D., Camara, Y. and Galbraith, J.W. (2020), "The COVID-19 containment seen through French consumer transaction data: expenditures, mobility and online substitution", available at: <https://voxeu.org/article/tracking-covid-19-consumption-shock-card-transactions>
- Chakraborty, I. and Maity, P. (2020), "COVID-19 outbreak: migration, effects on society, global environment and prevention", *Science of the Total Environment*, Vol. 728 No. 2020, doi: [10.1016/j.scitotenv.2020.138882](https://doi.org/10.1016/j.scitotenv.2020.138882).
- Chen, H., Qian, W. and Wen, Q. (2020), "The impact of the COVID-19 pandemic on consumption: learning from high frequency transaction data", available at: <https://ssrn.com/abstract=3568574>
- Chronopoulos, D.K., Lukas, M. and Wilson, J.O.S. (2020), "Real-time consumer spending responses to the COVID-19 crisis and government lockdown", available at: <https://voxeu.org/article/real-time-consumer-spending-responses-lockdown>
- Dixon, S., McDonald, S. and Roberts, J. (2002), "The impact of HIV and AIDS on Africa's economic development", available at: <https://doi.org/10.1136/bmj.324.7331.232>
- Fan, V.Y., Jamison, D.T. and Summers, L.H. (2016), "The inclusive cost of pandemic influenza risk", available at: www.nber.org/paper/w22137
- Garret, T.A. (2007), "Economic effects of the 1918 influenza pandemic: implications for a modern-day pandemic", available at: www.stlouisfed.org/~media/files/pdfs/community-development/research-reports/pandemic_ftu_report.pdf

- IBM (2020), "COVID-19 is significantly altering US consumer behaviour and plans post-crisis", available at: <https://newsroom.ibm.com/2020-05-01-IBM-Study-COVID-19-Is-Significantly-Altering-US-Consumer-Behavior-and-Plans-Post-Crisis?printable>
- Jonas, O.B. (2013), "Pandemic risk", World Development Report, available at: https://openknowledge.worldbank.org/bitstream/handle/10986/16343/WDR14_bp_Pandemic_Risk_Jonas.pdf?sequence=1
- Karlsson, M., Nilsson, T. and Pichler, S. (2013), "The impact of the 1918 Spanish flu epidemic on economic performance in Sweden: an investigation into the consequences of an extraordinary mortality shock", available at: http://conference.iza.org/conference_files/SUMS_2013/pichler_s6888.pdf
- McKibbin, W.J. and Sidorenko, A.A. (2006), "Global macroeconomic consequences of pandemic influenza", available at: <https://cama.crawford.anu.edu.au/pdf/working-papers/2006/262006.pdf>
- McKinsey and Company (2020), "Consumer sentiment is evolving as countries around the world begin to reopen", available at: www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covi%E2%80%A6
- Muellbauer, J. (2020), "The coronavirus pandemic and US consumption. CEPR policy portal", available at: <https://voxeu.org/article/coronavirus-pandemic-and-us-consumption>
- Orset, C. (2018), "People's perception and cost-effectiveness of home confinement during an influenza pandemic: evidence from the French case", *The European Journal of Health Economics*, Vol. 19 No. 9, pp. 1335-1350.
- Saeida, S., Rawtani, D. and Hussain, C.M. (2020), "Environmental perspective of COVID-19", *Science of the Total Environment*, Vol. 728 No. 2020, doi: [10.1016/j.scitotenv.2020.138870](https://doi.org/10.1016/j.scitotenv.2020.138870).
- Sands, P., Turabi, A.E., Saynisch, P.A. and Dzau, V.J. (2016), "Assessment of economic vulnerability to infectious disease crises", doi: [10.1016/S0140-6736\(16\)30594-3](https://doi.org/10.1016/S0140-6736(16)30594-3).
- Sharma, S., Zhang, M., Gao, A.J., Zhang, H. and Kota, S.H. (2020), "Effect of restricted emissions during COVID-19 on air quality in India", *Science of the Total Environment*, Vol. 728 No. 2020, doi: [10.1016/j.scitotenv.2020.138878](https://doi.org/10.1016/j.scitotenv.2020.138878).
- Sheth, J. (2020), "Impact of COVID-19 on consumer behaviour: will the old habits return or die?", *Journal of Business Research*, Vol. 117 No. 2020, pp. 280-283, doi: [10.1016/j.jbusres.2020.05.059](https://doi.org/10.1016/j.jbusres.2020.05.059).
- Surico, P., Kanzig, D. and Hacıoglu, S. (2020), "Consumption in the time of COVID-19: evidence from UK transaction data", Working Paper, available at: https://cepr.org/sites/default/files/news/FreeDP_14May.pdf
- World Economic Forum (2018), available at: www.weforum.org/agenda/2018/05/how-epidemics-infect-the-global-economy-and-what-to-do-about-it/
- Zambrano-Monserrate, M.A., Ruono, M.R. and Alcalde, L.S. (2020), "Indirect effects of COVID-19 on the environment", *Science of the Total Environment*, Vol. 728 No. 2020, doi: [10.1016/j.scitotenv.2020.138813](https://doi.org/10.1016/j.scitotenv.2020.138813).

Further reading

World Economic Forum (2020), available at: www3.weforum.org/docs/WEF_Chief_Economists_Outlook_April_2020.pdf

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