Socio-psychological and Economic Impact of Covid Pandemic on Slum Settlers: An Assessment

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Abstract:

The study articulates the multifaceted impact of the Covid pandemic on slum dwellers. Specifically, the impact of the pandemic on economic endurance, social prevalence, and health occurrence of the informal settlers is enumerated and intrigued. Research papers in different forms are collected from Open Athens, Scopus, and Google Scholar databases. Search terms like "economic impact", "social impact", "Socio-psychological impact" "health and sanitation", "slums" "slum dwellers", etc. are used for assembling literatures. A mixed method of traditional review with bibliometric analysis is adopted for the study. The process of developing the concept, gathering of information, selection and rejection, analysis, and interpretation has been applied to replicate the research findings. By synthesizing the process, it was found that the pandemic has shaken the economic condition of the inhabitants in terms of loss of employment, degradation of income level, the burden of emergency circumstances, etc. In addition, overcrowding in tenements restricted isolation and fostered infection. It is pertinent that health problems and social issues have a large, negative, and long-lasting impact on slum habitats. On the other side, prolonged socio-economic issues created stress and anxiety for them.

Keywords: Economic Endurance, Social Prevalence, Health Issues, Covid Pandemic

1. Introduction

India is the largest growing populated country in the world.and replaced China in the recent past. With the growing population, currently, India is dealing with a variety of issues, the rise of slums is one of them. The growth of slums creates many challenges (Isunju et al., 2011) and at the international level as well (Gambo, et al., 2012). Such growth of informal settlement is said to be linear with the growth of the size and number of cities (Sahasranaman & Bettencourt, 2021) and the velocity and volume will hill in the future as well (Mahabir et al., 2016).

It has been seen that a large number of people are migrating from rural to urban areas which leads to an increase in the urban population and ultimately result in the formation of slum areas. There are a lot of reasons for the migration of the population. The main reason can be identified as the employment and for the settlement in the area having proper and basic facilities are easily and adequately available. From various studies. it can also be found that accessibility of good and quality education also gives rise to migration and displacement of youth from rural villages to urban towns. The peoples who are migrating are mainly job seekers, municipality workers, daily wage laborers, housemaids, students, etc. More than one billion people are residing in urban slums globally. Urban slums are defined as regions lacking necessities like water, toilets, sewers, drainage, and adequate housing. Slum dwellers are the most vulnerable urban populations, and they face more difficulties than people

who are residing in megacities (Deb & Rao, 2020). The slum dwellers are confronting lots of challenges for their survival. The basic challenges, they are confronting can be categorized in terms Socio-psychological, Economic. and Health. Social issues like lack of drinking water, overcrowding, low level of education, social discrimination, etc. declined their standard of living in society. They are forced to live miserably as their hope died. The economic issues and challenges which act as a barrier to their growth include a low level of income, temporary employment, and non-availability of the fund during emergencies, no proper future plan, and no savings for future contingencies. It has been found that the people residing in slum areas are not exposed to good health and sanitation facilities. They problems like malnutrition, drainage problem, poor sanitization, hygiene problem, poor ventilation, etc. In spite of all these issues, they are not getting proper health services due to which they became susceptible to a variety of contagious diseases.

The slum-dwelling population in developing countries, which represents one-third of the total urban population was deemed to be the most vulnerably affected by the infection of Covid-19 (Akter et.al, 2021). It is true that the pandemic is indiscriminate and does not victimize on the basis of class, caste, ethnicity, or sex as its core, but few events have brought attention to the vast gaps in global public health as the Covid-19 pandemic has affected the place where

most social interaction occurs, as the coronavirus mainly spreads through contact with the affected people (Brotherhood et.al, 2022). Orders to remain at home and adhere to isolation rules are challenging to carry out in large cities where a significant section of the population lives in poverty and overcrowding (Ferrante et.al 2021). The emergence of Covid-19 impacted the lives of slum dwellers to a greater extent. The severity of the coronavirus was prove to be unbearable for the slum dwellers which changes their entire life. Due to corona infection, many of them lost their lives because of not getting proper treatment and isolation facilities. The corona pandemic took not only many lives but also made many people homeless, and jobless and many people are forced to migrate to other places also. Government agencies have worked vividly to uplift the condition. Government framing various policies making schemes for the slum dwellers. But all these are in vain unless and until these are not properly reaching the slum dwellers. So it is necessary to conduct a proper study on the socio-economic condition of the slum dwellers. Then a better policy can be framed as per the requirement and will help in making the country slum-free.

2. Objectives

The paper tried to explore the multifaceted impact of Covid-19 on slum dwellers. The paper also analyses the socio-psychological impact based on overcrowding, social discrimination, and exclusion, lack of drinking water, low level of education, and vulnerable community. Economic concerns like low levels of income, temporary unemployment, no emergency fund, no future plan, and fewer savings have also been studied. Health and sanitization impact on the basis of drainage problems, malnutrition, poor ventilation, poor sanitization, anti-mosquito facility, road facility, unhygienic pit latrine, etc. are also analyzed.

3. Methodology

This article examines current literature multi-dynamic impact Covid-19 on slum dwellers including socio-economical, socio-psychological, and health. A mixed method of the research of traditional literature review and bibliometric analysis has been adopted for materializing the objectives. Search engines like Open Anthem and Google Scholar were used to acquire research articles for the traditional review and the Scopus database is used for bibliometric analysis. The keywords which are used for the search purpose include "slum dwellers", "covid-19 pandemic", "socio-economic issues", "health and sanitization", "Psychological impact" etc. A total of sixty-five research papers from the year 2020 to 2022 have been taken for several analysis. A research design as suggested by Gibson & O'Connor (2003) in idea generation, collection, classifying, selection and interpretation has been drawn.

The workflow of the study started with selecting the keywords and database followed by an analysis of the data and interpretation of the results which is replicated below.

Figure 1: Workflow of the study

Search Criteria Keywords: "Socio-economic impact", "Sociopsychological impact", "Covid pandemic" and slum dwellers"

Data Collection

Database: Scopus,
Open Athens and
Google Scholar
A total of 65
research documents
selected after certain
refinements.

Data Analysis Interpretation Software & Tool: Bibliometrix of R

Source: Authors' compilation

4. Discussion

4.1 Socio-psychological Impact

The slums represent the highest level of urban poverty and constitute a case of particular vulnerability due to their overcrowded housing condition and lack of basic amenities that make it challenging to adhere to social distancing policies (Macchia et. al, 2021). (Nuwematsiko et al., 2021) found that as a result of the overcrowding and tight quarters of residents in Kampala's slums, social distancing, a crucial prevention tactic in the fight against Covid-19, is difficult to implement. Additionally, the lack of access to essential basic services including food, water, sanitation, and medical care makes slums even more vulnerable. The majority of the slum dwellers are poor. The number of Covid-19 positive cases has steadily increased, raising the question of whether the preventive measures are effective because they have forced slum dwellers to spend more time in crowded, dilapidated, single-roomed, low-quality shanties where people are required to share even occasionally overflowing

toilets and bathrooms. Additionally, extended families wind up squashed in small houses, endangering the lives of senior individuals who work and fragile youngsters (Nyadera & Onditi, 2020).

Social discrimination and exclusion embedded by many such issues resulted in mental stress for the dwellers. Pandey et al., (2022) observed that the slum settlers were mentally worried due to the fear of infection by the virus. (Koly et al., 2021) traced that 53% of the respondents from slums have suffered from mild to severe anxiety and insomnia. The pandemic has affected the denizens of several nations both physically and mentally but slum dwellers suffered a lot due to their nature of habitant and societal conditions. Substantiated by Solymari et al. (2022) that the detrimental effect of the pandemic on slum dwellers is due to the degraded socio-economic conditions.

4.2 Economic Impact

The novel coronavirus (Covid-19) infected millions of people at an

alarming rate. Low-income groups and marginalized sections have suffered a lot both socially and economically. In this context, Shah et al., (2022)hormonal, neuromuscular, and environmental factors. Herein, we describe a case of 12-year-old scoliotic girl with a double curve of initially 26° thoracic and 23° lumbar, seeking chiropractic care. The therapy was provided three times/twice a week for 6 months. Adjustments of the spine through chiropractic, both soreness and mobility, were shown to improve. A total correction in Cobb angle of 6° (23% analyzed that the Covid-19 pandemic had unprecedented effects socioeconomically on the disadvantaged segment, and effects are catastrophic. They were found to have extremely inadequate housing conditions and safety measures which could enhance the chance of Covid-19 transmission (Rahaman et al., 2021). In order to lessen the pandemic's effects on this vulnerable population, the public, commercial, and nonprofit sectors have all acted, particularly in the areas of health care and food security, because these economically challenged people make up a significant proportion of the population. In line of it, Aberese-Ako et al., (2022)in Ghana, most COVID-19 mitigating packages are not focused on vulnerable populations. Methods Concurrent mixed methods design was used to examine the socio-economic and health effects of COVID-19 among rural and urban-slum dwellers in Ghana. Four hundred respondents were sampled for the quantitative arm of the study, while 46 In-depth Interviews (IDIs opined that Covid-19 had negative socio-economic

effects on employment and food prices. During the lockdown female, household heads, daily wage earners, unemployed people, and tenants were a risk for poor food consumption status in both slums and non-slum areas (Buzigi & Onakuse, 2023)household food consumption scores (FCS. Other impacts included anxiety and depression as well as a fear of entering a hospital even when ill. The socio-economic implications of Covid-19 were more likely to affect young people (18-32 years old), men, urban slum dwellers, married people, employed persons, and low-income earners. During the Covid-19 epidemic, a higher percentage of low-income workers lost their income than workers in other occupations. Consequently, this worldwide economic crisis affected less skilled workers than skilled laborers (Pongutta et al., 2021).

4.3 Health and Sanitization Impact

After the pandemic, the situation was degraded for urban slum inhabitants and low-income groups. Before the epidemic had started, they already had a problem with the lack of access to health and sanitation services. Therefore, it is expected that accepting this large global epidemic will be a difficult task for them (Shermin & Rahaman, 2021). One of the key subjects in the fields of sustainable planning and public health is sanitation service. It is evident that low-income populations like slums or informal settlements cannot access basic sanitation services. In order to stop the transmission of this lethal disease, precautions such as deliberate hand washing, effectively

using water, and maintaining social distancing should have been practiced which is difficult for the slum dwellers. The preventive factors which include the latrine's handwashing stations, water supply system, and the number of users per latrine are closely tied to sanitation service and its quality. The health impacts of the Covid pandemic in slum areas might be intensified by poor and inadequate access to healthcare services in those areas. Slum dwellers infected with the virus or those in need of medical attention for other conditions may struggle to find accessible and high-quality health care and may be turned away due to a lack of resources in places where there is no universal health coverage and access to primary

health care is already difficult (Tampe, 2020).

4.4 Bibliometric Interpretations

Most Relevant Words

The top relevant word articles are shown in Fig. 1. The word that received the most citation is 177 and is reflected in the bar chart which is claimed by the word "Covid". The second largest relevant word is claimed to be "Slum" and the word has been used 134 times in the research area. The remaining eight words have different numbers of relevant sources at levels 87, 80, 61, 53, 50, 47, 45, and 32, indicates by deep blue and light blue.

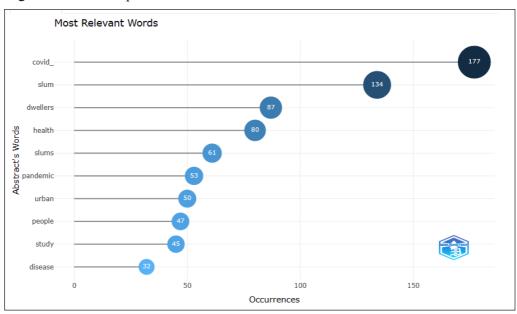


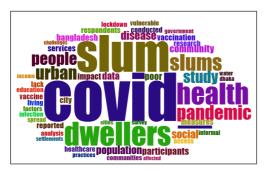
Figure 2: Most Frequent Words

Source: Authors' Compilation

Word Cloud

The magnitude of the terms in the word cloud here reflects how frequently they appear. Although the order of the phrases is somewhat random, the most important ones are given a large size and placed in the center to make them more noticeable.

Figure 3: Visualizing the word cloud



Source: Authors' Compilation

The word cloud in Fig. 3 displays the words that were most frequently used in the papers discussing the these of the current research work. The most common word is "COVID", the second most common word is "SLUM", and the third most common word is "DWELLERS" followed by Health, and Pandemic which implies that the researchers have studied how the Covid pandemic has affected slum Dwellers health and occupation.

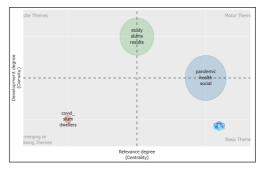
Thematic Map

A thematic map is created, and divided into four topological regions based on density and centrality. The result came from a semi-automatic evaluation of the titles of all the papers which are selected for the study as well as additional relevant keywords (Other

than the author's keywords) to catch deeper variations. The upper right quadrant contains "Motor" or "Driving" which are indicated by high density and centrality. The top middle quadrant contains specific and under-represented topics.

The emerging and vasic themes replicate covid, pandemic, health, and social. It can be inferred that even after a year fromm pandemic, still research opprtunities exists in socio-economic and health conditions of slum dwellers.

Figure 4: Thematic map with four topological regions



Source: Authors' Compilation

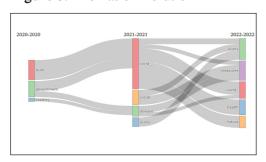
Thematic Evolution

The picture below shows how the themes changed from 2020 to 2022. The data shows a number of frequently utilized topics. On the left side, a few of the motifs that will be popular from 2020 are shown. There are three themes listed each with a different size depending on how commonly utilized it is. The most popular themes from the years between 2020 and 2021 are represented in the middle section, which has a total of four themes. In the year 2021 and 2022 the most popular topics are shown in the

right section. Five themes are listed, each habing a specifc size dependent on how it will be used.

The left section shows that in 2020. The word "Slum" has been first added to "Covid". The second word "Government" is added to "Covid" and "Disease". The third word "Country" is added to "Disease". In the middle section, the thematic evolution is reflected from the period of 2021. The first word "Covid" was added "Slums", "Measures", "Covid", "Health" and "Future". The second word "Social" is added to "Slums" and "Measures". The third-word "Disease" is added to "Measures" and "Covid". And the fourth-word "Slums" is added to "Slums". In the right section, the theme from the period 2022 is shown. The word "Slums" is added to "Covid", "Social" and "Slum", the word "Measures is added to "Covid", "Social" and "Disease" Whereas the word "Covid" is first added to "Covid" and "Disease" and the last two-word "Health" and "Future" add to "Covid". The thematic evolution infers the pandemic effect on slum dwellers. All the slum dwellers are measuredly affected by the Covid pandemic.

Figure 5: Thematic Evolution



Sources: Authors' Compilation

5. Implication

The social and economic exclusion triggered the challenges for the slum dwellers during the pandemic. Social disruptions have many ill and odd effects (Sholihah & Shaojun, 2018). In addition, health aspects of many civilizations around the world have changed as a result of the Covid-19 pandemic. The pandemic and the ensuing government actions had severe effects on people living in urban informal settlements, both directly and indirectly. Curfews, lockdowns, and working from home are among the most widely used precautions against the virus, but they have ignored the fate of slum inhabitants, who are forced to choose between life and a living. Despite the lockdown policies and curfews, slum dwellers to spend more time in crowds, single-roomed houses, and run-down and common toilets are forced to share even at times of overflowing bathrooms and toilets. Use of such toilets creates several issues in form of contagious diseases for them (Isunju et al., 2011).

Mobile clinics with critical stocks can be strategically placed in slums to make up for the few health facilities by distributing e-food, and e-medical vouchers, utilizing technology and community health professionals to reach out to residents deep inside the slums. When it comes to handling the increasing number of cases of gender-based violence, social workers can be extremely helpful. Additionally, they can help the worrying number of teenage girls who became pregnant while the school was under lockdown by

providing counseling and advice. These at-risk groups might not contract the virus, but the circumstances in which they find themselves as a result of the pandemic's indirect effects necessities a serious reaction from the government and other stakeholders. Slum settlers' issues should not be dealt solely from physical point of view. Yeboah et al. (2021) emphasized that economic components are necessary for the regeneration of slums.

6. Conclusion

The paper lucidly elucidated the economic socio-psychological and impact of the pandemic on informal settlers. The research work is assumed to be first of its kind to address the sociopsychological issue of an emergency occurrence like pandemic and to entrench it with economic distortions and health disruptions. The nexus among all these three variables viz. economic exclusion, social commotion and health disorders proliferates chaos resulting stress and anxiety among the informal settlers. This finding of the study matches with the explications of Pandey et al., (2022) and Koly et al., (2021).

On the other side, despite the disease's harmful effects on the world as a whole, it should serve as a wake-up call for governments, particularly in regard to how those who live in informal settlements are handled. Short-term and long-term phases can be used to accomplish this. The government must immediately guarantee that these preventive measures are successful

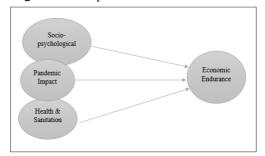
and appropriate for the problems faced by people from various socio-political and economic backgrounds. These can comprise a slum-specific policy document outlining socio-assistance programs for slum residents. For instance, given that lowering direct taxes may not have as much of an effect on the unorganized sector, the government may create another poor subsidy that would directly help those living in slums. Longterm remedies might be provided by the government by incorporating some of the lessons learned from Covid-19. For instance, a slum rehabilitation program may use less expensive technologies to create well-organized prefab dwellings. It is worth mentioning in this regard that relocation sites under rehabilitation programmes should be located near to the slums (Killemsetty, et al.,2021) by availing other economic and social benefits. Slum reintegration strategies across the world have failed miserable due to considering the only physical attributes and not accounting the sociopsychological factors. Similar incidents were witnessed in Nigeria (Ilesanm, 2012), Chennai, India (Nagarajan, 2017), Seoul, Korea (Dennis, 1990). In addition, beneficiary participation is key for the revival policy (Atia, 2019).

Numerous social, economic, and healthrelated issues will be addressed by these types of projects, which will improve the living condition of slum people. For instance, carefully through-outlow-cost housing efforts will give locals improved access to sewage, water, and electrical services. To help those living in informal settlements, the government must engage social workers and their services more during and after the pandemic. The consequences of relying solely on government resources during the pandemic are obvious. Different stakeholders can deal with various problems that the pandemic is bringing up. Social workers must be classified as essential workers during the lockdown and curfew in order to allow them freedom of movement and access to the desperately needed services for slum inhabitants.

7. Future Direction of the Research

The present study has collected research articles from Open Anthem and Google Scholar databases. Dimensions, Scopus, and other popular databases could have been used for more effective research work. The number of literature reviews is limited to thirty which could have been significantly increased to obtain an optimum result. In addition, the core dimension of the study is categorized into social, economic, and health problems of slum dwellers. Other micro areas like financial literacy, bank accessibility, slum dwellers' knowledge and attitude, and financial behavior are ignored, the inclusion of all these factors could have provided more value to the study conducted. A model can be developed with the constructs

Figure: 6: Proposed Model



Source: Authors' compilation.

containing Socio-psychological, Pandemic Impact, Health and Sanitation with Economic Endurance that can be empirically tested. The proposed model is as follows.

8. Funding

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