



Socio-Economics Obstacles in Availing Health Facilities During Covid-19 in Khyber Pakhtunkhwa: A Case Study of Low-income Beneficiaries in District Hospitals in Peshawar

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Abstract

This study focuses on “Socio-Economic Obstacles in availing health facilities during COVID-19 in Peshawar, Khyber Pakhtunkhwa.” It investigates the socio-economic factors that increase the vulnerability of poor people to COVID-19. The objectives of the study are to focus on obstacles faced by poor people in accessing health facilities and socio-economic factors that increase vulnerability during COVID-19. The primary data was collected from a total of 384 respondents using the Cochran model and random sampling. Certain factors were significantly associated with COVID-19, including dependence on household income (P=0.000), the poverty ratio (P=0.013), knowledge about COVID-19 (P=0.000), home quarantine (P=0.016), exposure to COVID-19 (P=0.019), and access to hospital facilities (P=0.000). Furthermore, during COVID-19, the lockdown halted businesses, people lost jobs, and the poverty ratio increased. The data revealed that the COVID-19 pandemic has placed a heavy burden on health care centers. The majority of people are poor, and everyone availed of government facilities, but access to these facilities is more difficult than to private hospitals. It was also found that overpopulation, lack of management skills, and unavailability of medicines increase the vulnerability of poor people during this pandemic.

Keywords: Socio-Economic Barriers, Healthcare Access, COVID-19 Pandemic, Low-Income Populations, Health Inequality, Public Health System, District Hospitals, Healthcare Utilisation, Vulnerable Groups, Social Determinants of Health, Khyber Pakhtunkhwa, Peshawar, Pakistan

Introduction

The present COVID-19 pandemic has affected every walk of life. However, the effects of the current pandemic are different on the poor segment of society. The poor people are more vulnerable to the pandemic than the rich people. They have no access to health facilities. COVID-19 infected and killed a huge number of people all over the world, especially in developing countries (Vasquez, 2020). The poor countries do not have a functional health

system, which increases their vulnerability during the pandemic. The healthcare system's sustainability is strongly intertwined with the larger social system that surrounds it. Health protection is dependent not just on a well-functioning health system with universal care, but also on social inclusion, fairness, and solidarity. (Devakumar et. al., 2020). The COVID-19 pandemic continues to have an impact on people's lives in Pakistan (Pakistan COVID-19 Socio-Economic Impact Assessment and Responses Plan, 2020). Pakistan's public health system is already under pressure, with one doctor for every 963 persons and one hospital bed for every 1608 people (UNDP, 2020). There are 200,000 doctors and 1.4 million nurses to properly facilitate and handle the pandemic situation in Pakistan. Pakistan is the world's fifth most populous country, and currently, it is difficult to deal effectively with a situation that arises during the pandemic (UNDP, 2020). More than 40 percent of people in Pakistan live below the poverty line. The poor people could not easily access health facilities as compared to the people of the rich class. Therefore, poor people are facing severe socio-economic and health problems in Pakistan. Without reference, sometimes they cannot access health facilities in Pakistan. The health system could not equally facilitate the people, irrespective of their socio-economic class. The poor cannot afford the expenditure on health and cannot visit the doctors in their private clinics regularly. And mostly, the poor people who are living in the rural area cannot even afford the expenditure on transport. It is argued that In poor and overpopulated countries, it is difficult to obtain convenient appointment times in both rural and urban centers (Mandal, 2019). Therefore, the poor people in Pakistan are facing socio-economic problems, particularly during the current pandemic.

Objectives of the Study

- To investigate the obstacles faced by poor people in accessing health facilities during COVID-19;
- To investigate the socio-economic factors that increase their vulnerability to COVID-19;

Hypothesis

“Socioeconomic disparities create problems and vulnerabilities for poor people.” Pandemic diseases increase the health problems of poor people.

Literature Review

The COVID-19 pandemic has significantly disrupted global development efforts, placing immense pressure on health systems and socio-economic structures worldwide. Governments and international organizations mobilized political, financial, and technical resources to control the spread of the virus. However, the pandemic exposed deep-rooted inequalities, particularly in developing countries, where fragile health systems struggled to respond effectively (World Health Organization, 2020). The crisis has not only affected public health but has also hindered progress toward achieving the Sustainable Development Goals (SDGs), especially in low- and middle-income countries. Pandemics are not new to global history, but COVID-19 highlighted structural weaknesses in healthcare systems, particularly in developing countries such as Pakistan. During such crises, healthcare systems often prioritize emergency responses, leading to the neglect of routine healthcare services. This imbalance disproportionately affects vulnerable populations, especially low-income groups, who already face barriers in accessing healthcare (Khetrapal & Bhatia, 2020). As countries transition into the post-pandemic phase, efforts to restore economic activities often overshadow the need to address the healthcare challenges faced by marginalized communities. Globally, COVID-19 spread rapidly, infecting millions within a short period and resulting in significant mortality (WHO, 2020). The pandemic evolved into a humanitarian crisis, particularly in overpopulated and resource-constrained countries. Developing nations faced greater challenges due to

limited healthcare infrastructure, inadequate resources, and high population density. These factors exacerbated existing inequalities in healthcare access and outcomes. The pandemic also had severe socio-economic consequences, pushing millions into extreme poverty and increasing food insecurity worldwide (WHO, 2020). Socio-economic inequalities remain a key determinant of health outcomes globally. Health disparities exist not only between developed and developing countries but also within nations. Individuals from low-income households experience poorer health outcomes and have limited access to healthcare services. For instance, children from poorer families face higher mortality risks compared to those from wealthier households. Moreover, healthcare interventions are often first utilized by more affluent groups, particularly when policies are not specifically designed to target disadvantaged populations (United Nations Children's Fund, 2024). This unequal distribution of resources reinforces existing health disparities. In the context of Pakistan, the healthcare system faces numerous structural and financial challenges. Despite some improvements over the years, Pakistan continues to rank low in global healthcare performance indicators (WHO, 2020). A significant portion of the population lives below the poverty line, limiting their ability to access quality healthcare services. Public healthcare facilities are often under-resourced, with insufficient staff, infrastructure, and medical supplies. Consequently, patients face long waiting times, delayed treatments, and, in some cases, worsening health conditions due to lack of timely care. Healthcare inequalities are further intensified by disparities in the distribution of human health resources (HHR). Research indicates significant imbalances in the availability of doctors, nurses, hospitals, and medical facilities across regions in Pakistan (Nawaz & Khalid, 2021). Rural areas, in particular, suffer from limited access to healthcare services, while urban centers have relatively better facilities. This unequal distribution contributes to disparities in health outcomes and access to care. Economic barriers also play a critical role in healthcare access. Pakistan has one of the highest rates of out-of-pocket healthcare expenditures, placing a heavy financial burden on individuals (Khan, 2019). Public health spending remains significantly low compared to global standards, limiting the government's ability to provide universal healthcare services. As a result, private healthcare providers have expanded their services; however, their high costs make them inaccessible to low-income populations.

Comparative evidence from developed countries suggests that lower-income groups tend to utilize healthcare services more frequently due to higher health needs. However, in developing countries, disparities arise due to limited access to healthcare services rather than differences in utilization (van Doorslaer, 2000). This highlights the importance of improving equitable access to healthcare resources in developing contexts. Additionally, social determinants such as education, income, occupation, and geographic location significantly influence health outcomes and access to services (Marmot & Friel, 2008). Pakistan is also experiencing an epidemiological transition, characterized by a dual burden of communicable and non-communicable diseases. This transition places additional strain on an already weak healthcare system. Furthermore, governance challenges, including inadequate policy implementation and lack of coordination between federal and provincial authorities, have hindered healthcare reforms (Shah, 2012). The COVID-19 pandemic has further intensified existing healthcare disparities. Vulnerable populations, including low-income groups, informal workers, and rural residents, have been disproportionately affected. The crisis highlighted the urgent need for sustainable healthcare policies, increased public health investment, and equitable distribution of resources to strengthen health systems and reduce disparities.

Theoretical Framework

The theoretical foundation of this study is based on the Fundamental Cause Theory, which explains how socio-economic status (SES) influences health outcomes (Link & Phelan, 1995). According to this theory, individuals with greater access to resources such as income, education, and social power are better able to access healthcare services and maintain better health. In contrast, low-income individuals face structural barriers that limit their access to healthcare, resulting in poorer health outcomes. This framework is particularly relevant for understanding health inequalities in developing countries, including Pakistan. In conclusion, the literature highlights that socio-economic inequalities, weak healthcare systems, and uneven resource distribution are key factors contributing to disparities in healthcare access. The COVID-19 pandemic has further exposed these challenges, emphasizing the need for targeted policies to ensure equitable healthcare access, particularly for vulnerable populations in developing countries.

Methodology

The quantitative method was adopted for conducting the study, and a structured questionnaire was used to examine the socio-economic impacts of COVID-19. Primary data were collected from 384 respondents selected through purposive sampling from two major hospitals (HMC and RMI) in Peshawar to compare public and private healthcare experiences. Statistical analysis was carried out using SPSS, applying descriptive statistics and t-tests to determine relationships between variables. The study acknowledges limitations such as time constraints and restricted geographical scope, while ensuring ethical considerations, including voluntary participation, confidentiality, and informed consent.

Data Analysis

The data collected from 384 respondents regarding the socio-economic and healthcare challenges faced during the COVID-19 pandemic. The findings reveal that the pandemic had a profound impact on both health and socio-economic conditions, particularly among vulnerable and low-income populations. The demographic analysis shows that the majority of respondents were male (53.1%) and middle-aged, with nearly equal representation from urban and rural areas. A significant proportion of respondents reported either confirmed COVID-19 infection or symptoms, although many avoided testing due to fear and social stigma. The study highlights that government hospitals were the primary source of treatment (60.4%), mainly due to affordability, while private healthcare was mostly utilized by financially stable individuals. However, the healthcare system was found to be overburdened, with limited access to isolation wards, oxygen, and ventilators. Socio-economic factors played a critical role in shaping the impact of COVID-19. Variables such as employment status ($p=0.013$), housing status ($p=0.000$), dependency ratio ($p=0.000$), financial condition ($p=0.037$), and socio-economic impact ($p=0.013$) were found to be statistically significant. A large number of respondents experienced income decline, business losses, and job insecurity, which increased their vulnerability. Access to healthcare facilities was also significantly affected ($p=0.002$), especially for rural populations who faced referral issues and lack of nearby services. Additionally, overcrowded households and joint family systems contributed to higher exposure and transmission of COVID-19 ($p=0.019$). Although awareness of COVID-19 SOPs was very high ($p=0.000$), the majority of poor respondents reported difficulty in following these preventive measures due to financial and living constraints ($p=0.005$). Most patients were quarantined at home ($p=0.016$) due to limited hospital capacity and social perceptions. The availability of healthcare resources was a major concern. Significant shortages were reported in isolation wards ($p=0.000$), oxygen supply ($p=0.002$), and

ventilators ($p=0.003$). These limitations directly contributed to increased health risks and mortality. The study strongly confirms that the non-availability of essential health facilities significantly increased the death ratio ($p=0.000$). While some variables such as education level, type of hospital, and perceived hospital burden showed non-significant relationships, the overall findings clearly indicate that structural inequalities, limited healthcare infrastructure, and poor socio-economic conditions intensified the impact of COVID-19. The researcher concluded from the above data analysis that COVID-19 disproportionately impacted low-income and vulnerable groups due to limited healthcare access and economic instability. Socio-economic inequalities significantly influenced pandemic outcomes, particularly in employment, housing, and healthcare availability. Strengthening healthcare systems and reducing social disparities are crucial for managing future public health crises.

Findings

The present study was conducted to investigate the socio-economic obstacles in availing of health facilities during COVID-19 in Khyber Pakhtunkhwa. Major findings of the study were drawn from the data of the respondents i.e. COVID-19 patients through analysis are presented below.

Most of the i.e. 53.1% total respondents were male and while the rest of 43.9% were females. While the majority, i.e. 53.3% belongs to the city and the remaining i.e. 49.7% are from the village. Most of the i.e. 53.4 COVID-19 patients were in the age group of 40-60. The majority of them i.e. 80.7% have their own houses and were found strongly significant ($p=0.000$). Findings regarding the employment status of the household in which most of the i.e. 46.4% are employed were found significant ($p=0.013$).

There was the majority of them i.e. 53.6% are from lower socio-economic class and its association with COVID-19 was found non-significant ($p=0.060$). Majority of the respondents i.e. 80.7% have large families. Most of them i.e. 40.6% and 60%-80% of people were dependent on their household were found strongly significant ($p=0.000$). Most of the i.e. 52.6% claimed that their financial condition remained the same because most of the respondents were government servants and its association with COVID-19 was found significant ($p=0.037$) Almost the majority of the respondents i.e. 89.6% conformed that their poverty was extremely effected in corona pandemic the ratio of poverty on COVID-19 was found significant ($p=0.013$). Furthermore, 68.8% livelihood of the people was adversely affected, and losses in their business in the corona pandemic and their association with COVID-19 was found non-significant ($p=0.354$).

Almost all of them i.e. 90.4% agreed that the corona pandemic increases the huge burden on health care centers and its association with COVID-19 was found non-significant ($p=0.201$). There was majority i.e. 43.0% confirmed that they have easy access to health facilities during the corona period and its association with COVID-19 was found significant ($p=0.002$). There was majority i.e. 60.4% of COVID-19 patients take treatment and avail health facilities from government hospitals while its association with COVID-19 was found non-significant ($p=0.602$). Most of the i.e. 48.4% poor patients of COVID-19 disagree with their access to government health facilities during the corona pandemic and was found non-significant ($p=0.200$) associated with COVID-19. There was majority i.e. 71.4% of poor COVID-19 patients confirmed that they faced problems in getting health facilities in government hospitals and its association with COVID-19 was found non-significant ($p=0.666$). There were almost all of i.e. 93.5% respondents agree and claimed that they have sufficient knowledge about COVID-19 standard operating procedures (SOPs) while its association with

COVID-19 was glaringly significant ($p=0.000$). Almost all of the i.e. 91.7% respondents agreed and confirmed that the government provides complete knowledge about COVID-19 SOPs on every platform while associated with COVID-19 is significant ($p=0.013$). Almost all of the i.e. 91.7% poor respondents strongly agreed with the statement that following COVID-19 SOPs for poor patients is very difficult because someone is serving below the poverty line so how they fulfilled the SOPs while its association with COVID-19 was found to significant ($p=0.005$). There were almost all of them i.e. 94.8% COVID-19 positive patients in our respondents are quarantined at home while its association with COVID-19 was found significant ($p=0.016$). The majority of the i.e. 44.3% respondents agree that they are positive with the contacts and exposure with other COVID-19 detected patients and it was found significant ($p=0.019$) with COVID-19. The majority of the i.e. 43.8% respondents disagree with this statement that government hospital is the exposure to COVID-19 while was found highly significant ($p=0.000$). The majority of the 62.8% of respondents claimed that their whole family was affected by COVID-19 and got positive while its association with COVID-19 was found strongly significant ($p=0.000$).

Most of the i.e. 38.0% respondents are unsatisfied with government health facilities and they avail private health facilities in COVID-19 duration for the treatment of covid-19 disease and it was found non-significant ($p=0.062$). The majority of the 48.7% of respondents are disagreed with access to a covid-19 isolation units in government hospitals and getting a bed in isolation is a tough job while its association with COVID-19 was found densely significant ($p=0.000$). Most of the i.e. 33.3% respondents agree that the availability of oxygen to the patients was sufficient and its association with COVID-19 was found significant ($p=0.002$). Most of the respondents i.e. 34.4% are disagreed that ventilator is not available for everyone in the government hospital and private hospital people can't afford the exposure of ventilator because they charge per hour and its association with COVID-19 was found significant ($p=0.003$). The majority of the respondents i.e. 58.6% are satisfied with overall health facilities in the health sector with proper and international standard SOPs while its association with COVID-19 is non-significant ($p=0.101$). The majority of the 66.7% of respondents agreed with the statement that non-availability of health facilities in the hospital increased the death ratio and its association with COVID-19 was found glaringly significant ($p=0.000$). There was most of them i.e. 42.2% of respondent agreed and confirmed that they can afford the treatment of COVID-19 but these respondents, most of the people are rich while its association with COVID-19 was found to significant ($p=0.006$).

Conclusion

Pakistan has been facing various socio-economic and political problems including one of the major problems is health problems which go to their extreme stage in the period of COVID-19. There are many reasons behind these obstacles facing in COVID-19, like poverty, large family size, social attitude, lack of implementation of laws related to the health system, worst economic crises, and lack of proper planning. Keeping in mind the above-mentioned socio-economic causes of COVID-19, the present study explored the socio-economic dimensions of people in availing health facilities in COVID-19 in the hospitals of Peshawar Khyber Pakhtunkhwa. For proper and authentic investigation the quantitative research method was used for the completion of this study (see chapter3 for detail). The data was collected for males and females.

Economic Dimensions of COVID-19 Pandemic

It is concluded that the majority of COVID-19 patients who faced obstacles are belongs to a lower economic class. In this class, most of the government servants claimed that their

financial situation remained the same throughout the period but on the other side private sector employees are harshly affected and they lost their jobs and their poverty goes to an extreme level and dropped these people to below the poverty line. More ever, the livelihood of the business community was badly disturbed their businesses are completely stopped due to lockdown and they are paying rent, utility bills, etc on closed businesses and from their pockets.

Social Dimensions of COVID-19 Pandemic

It is concluded that the majority of COVID-19 patients are from large families having a high dependency ratio. The large family size creates hurdles in COVID-19 especially in the treatment of social distancing like in large families it's impossible to take care of social distancing in a large populations and small homes. Furthermore, large and joint families don't have a specific room for home quarantine due to less number of rooms. It was found that most people believes in myths they didn't do tests due to the fear of sealing and lockdown of their homes for 14-21 days and another problem was concluded that the people didn't admit their patients in isolation because of the circulation of myths that the in the hospital's medical staff are killing people by injection to increase the death ratio for funds. More ever, due to the conservative traditions of Pakhtun culture people don't avoid social distancing, hand shaking, hugging, and another social gathering like marriage and death ceremonies.

Obstacles to Lower Class COVID-19 Patients in Government Hospitals

It is concluded that the maximum number of poor COVID-19 patients have no access to government health facilities and getting private health facilities is not possible for poor people because there was charging per hour from patients. The majority of respondents claimed that getting a bed in a government isolation unit was a hectic job and ventilators is just little in number of hundreds of patients waiting for ventilators. Furthermore, for those who were admitted to the isolation unit one patient is mandatory with the patient to take care of their patients as a patient attendant so this attendant is the major carrier of the COVID-19 virus.

Theoretical Implication of the Study

Different factors are considered responsible for the obstacles in COVID-19. The scholarly works of various academicians focused on the socio-economic aspects of the COVID-19 affected people. As a result, my research findings, which include a quantitative analysis based on COVID-19's two primary socio-economic dimensions, are detailed (see detail in chapter 4). Link and Phelan's scientific effort is based on the theoretical implications of basic causes (1995). This theory emphasis on the economic inequalities' effects on the health of poor people who are not in a position to get treatment from advanced medical centers. Reducing disparities in health has a positive impact across Socio-Economic status SES groups. This theoretical provides theoretical insights to study because it also the different socio-economic status groups.

Areas for Future Researchers

The emphasis of this research was on the socioeconomic features of COVID-19's disadvantaged patients. The psychological impacts of COVID-19 sufferers and their families are not covered. This area has been left for other researchers. There are some other dimensions of covid-19 such as poverty, inadequate health facilities, and civic sense which discourage covid-19 patients in Pakistan and are considered a potential areas for future research.

Recommendations of the Study

After the analysis of the study, the following recommendations need to be implemented to reduce the -19 virus and facilitate Patients of corona in Pakistan.

1. Most of the COVID-19 patients belong to poor and larger families. They are unable to afford the treatment economically. The government has been working to control overpopulation but this government need to establish and facilitate the primary and secondary care hospital and make them easy to access.
2. To ensure a high standard of trust with the hospital services in Peshawar. Because a load of bordering areas is also on these hospitals, the quality of care must be maintained.
3. Government should prepare proper planning that in COVID-19 isolation unit just received patient and it will be there till recovery no any other attendant or any relative can meet and attend to the COVID-19 patients.
4. Poverty is considered the mother of all socio-economic problems. The government should initiate poverty reduction programs and allot a specific budgets to facilitate the poor people and the government should especially need to support these people in the time of the pandemic. More ever, the government should need to make a strategy for those who lost their jobs, business stops in lockdown.
5. The hospital administration should encourage community participation in the hospital service to build more trust in the hospital and its staff. The patients should be given the chance to recommendations and comment. The hospital staff must be motivated to perform better and the behavior of the staff should be friendlier. Furthermore, in these type of pandemics, the medical superintendents and Head of the hospitals monitor every situation by themselves and daily visits to the wards and pandemic response units.
6. It suggests that first of all government conducts health surveys on regular basis in all provinces of Pakistan to know the official/true situation of their health system it helps the government for policy making and to be ready for future pandemics.

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