

Critical medical care and treatment services in Andhra Pradesh during COVID-19 pandemic

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Abstract: Background: The period of COVID-19 is a term that affects the lives of all people. It has had a huge impact on the jobs, lives and economies of the entire countries of the world. The health sector is the only sector that has not been affected while this pandemic has hit all sectors. The insurance industry plays a major role in the Indian economy by providing security to individuals, groups, organizations and businesses. During this period the growth rate of the insurance industry increased by 15-20 percent and the GDP increased by seven percent. It is reported to the Insurance Regulations and Development Authority of India which regulates and supervises the insurance sector.

Objective: Examine how COVID-19 has affected the uninterrupted provision of essential health services across different healthcare facilities in the Andhra Pradesh districts.

Methods: The data of 150 participants helped by the author from 26 districts of Andhra Pradesh was used as secondary analysis during the COVID-19 waves. The characteristics that are dependent on self-access to health care, difficulties getting medical services. The independent factors are age, gender, educational background, employment position and macro-social vulnerability status. The correlation between dependent and independent variables can be adjusted by changing the objective.

Results: 42 (28%) and 108 (72%) of the participants reported having trouble getting access to medical care and prescription drugs respectively. The people facing several difficulties with COVID-19. This study suggests the services of health care treatment with and without medical insurance.

Keywords — COVID-19, Essential health services, Health care institutions.

I. INTRODUCTION

Healthcare management provides better quality care for individuals who suffer ill health. Healthcare delivery was severely affected during the early stages of the COVID-19 pandemic delivery of healthcare services was significantly disordered [1]. Several restrictions have been imposed causing access the routine and emergency communicable or noncommunicable diseases in management disrupted.

Depending on the population the pandemic's impact varied in intensity. For example, long-term critical care services, rehabilitation, a population whose entire healthcare has been disrupted during pandemic hospital facility-based care [2], people with low educational status [3], elders [4] and macro-socially vulnerable populations such as daily wage workers. These are low-income persons who are also disproportionately afflicted by COVID-19 pandemic [5,6].

At a separate level, concentration income may have influenced admission to care and incapacity to obtain service due to low socioeconomic position and poor technological competency. Previous studies designated that

people with trouble retrieving all facilities during the COVID-19 pandemic [7].

The purpose of this article is to determine why some population's access to healthcare services is hampered. This study specifically examines the association between sociodemographic characteristics (age, gender, education level, job position and macro-social vulnerability status) and healthcare access by patients with critical care needs during the COVID-19 pandemic. Furthermore, to investigate the relationship between reported healthcare services and the use of alternative medical treatments. It was hypothesized less education and employability status as well as macro-social financial status are strongly linked with their needy healthcare services and higher usage of alternative medical services.

II. METHODS

Primary analysis, study design and examination of the participants comprised an intensive analysis of data collected through a cross-sectional study involving 10 students from the districts of Andhra Pradesh during the

COVID-19 pandemic. The survey was conducted in December 2022. The study was open to anybody over the age of 18 with no exclusion restrictions. Before taking the survey, participants in the study could check a box to indicate their consent. Elsewhere, complete information about the methodology of study and collection of tools by literature.

A. Sample Size

The largest worldwide prevalence of a health condition was used to determine the sample size for the main investigation. From this study, the minimum sample size was set at 150 for valid respondents from all the districts of Andhra Pradesh. The critical medical needs were extracted from the dataset, identifying those who self-identified among the complete data of 150 (24.4%) for this study. Critical medical needs refer to all ill patients requiring urgent care and respondents who said 'yes' to the question 'Did you have a critical medical need during the COVID-19 pandemic'? Were identified as individuals with medical needs.

B. Data Collection Tool

The instruments for measuring the study questionnaire's reliability, dimensionality and overall content validity index were reviewed. Data collection details for the validation of both English and Telugu languages are assessed.

C. Dependent variables - Independent variables

The independent variables include the respondent's age, gender at birth (male, female, others), education level (no formal education, primary, secondary and college/university), employment status (retiree, student, unemployed, employed) and macro-social vulnerability status. Respondents were classified as having little or no risk may be at increased risk or being at increased risk due to their medical condition for severe COVID-19 risk. Respondents were identified from the list of medical conditions or by specifying their ailment if it was not listed. This was used to categorize the risk profile.

D. Data analysis

Raw data were analysed with statistical tools.

III. RESULTS

Table 1 displays the critical care needs of 150 participants. Out of these 56 (37.3%) had access to healthcare services and 42 (28%) experienced difficulty in obtaining medications. A primary level of education (13%) was associated with a higher proportion of retirees (3%), putting them at an increased risk for severe COVID-19 (7%) with regard to healthcare services. Additionally, a higher percentage of males (34%), individuals with no formal education (50%), those who were unemployed (74%) and those experiencing increased severity of COVID-19 faced challenges with medications.

The critical care needs of 150 participants. Out of these

108 (72%) opted for alternative medical care. Specifically, males (40.66%), individuals with a primary-level education (41%), the unemployed (64%), those with usual healthcare needs (55%) and those requiring medications (60%) turned to alternative medical care.

IV. DISCUSSION

The results of the study indicate that barriers to healthcare access, medication acquisition and the utilization of alternative medical services may arise for individuals with critical care needs during the COVID-19 pandemic influenced by factors such as employment status the risk of severe COVID-19 infection and social vulnerability status. Age, gender and educational position may all play a role in medicine access issues. Younger people, men and those with only a secondary education are more likely to have difficulty acquiring medications [2]. Furthermore, persons encountering trouble getting drugs and those with a primary level of education appear to be more motivated to seek alternative medical treatments. Individuals with a secondary education were less likely than those with a college/university education to use alternative medical services. The finding confirmed the premise that underprivileged people will have more difficulty accessing healthcare, getting medication and utilizing alternative medical services during the first wave of the COVID-19 pandemic. While the global challenge posed by the COVID-19 pandemic on healthcare services and accessibility during the first wave is widely acknowledged, there is limited understanding of how it contributed to healthcare access inequalities among diverse populations. As far as we know, this study stands among the few that emphasize the pandemic's impact on disparities in access to care within specific demographic groups. The study's limitations encompass its cross-sectional design constraining the establishment of causal-effect relationships between the variables under investigation. Online data collection excluded individuals without access to the internet and smartphones. The use of this strategy for worldwide data gathering during the pandemic's initial wave which was typified by broad mobility and contact restrictions in most countries was connected to reduced response rates.

The stigmatization of self-reporting HIV status in numerous communities may lead to under-reporting as well. We observed that individuals living with HIV those who engage in drug use, in transactional sex and those at an elevated risk for COVID-19 faced difficulties in accessing healthcare and obtaining medication. Multiple reasons, including the diversion of resources to treat the urgent demands connected with the COVID-19 epidemic, contribute to the limited availability for people in need of essential care. Other impediments to healthcare access include lower consumption of healthcare services due to country policies on elective treatment, fear of contagion,

Table 1 Multivariate regression analysis of factors associated with access to health care services and obtaining medications by people critically ill during the first wave of the COVID-19 pandemic (N = 150)

Variables	Total (N = 150)	Challenges with access to health care		Difficulty with obtaining medication	
		Yes N =56 (37.3%)	No N = 94 (62.7%)	Yes N = 42 (28%)	No N = 108 (72%)
Economic region					
LICs	6 (4%)	4 (67%)	2 (33%)	2 (33%)	4 (67%)
LMICs	83 (55%)	28 (34%)	55 (66%)	24 (29%)	59 (71%)
UMICs	27 (18%)	11 (41%)	16 (59%)	18 (67%)	9 (33%)
HICs	34 (23%)	15 (44%)	19 (56%)	11 (32%)	23 (68%)
Sex at birth					
Male	62 (41%)	24 (39%)	38 (61%)	21 (34%)	41 (66%)
Female	88 (59%)	32 (36%)	56 (64%)	20 (23%)	68 (77%)
Level of education					
Non formal education	10 (6%)	4 (40%)	6 (60%)	5 (50%)	5 (50%)
Primary	20 (13%)	9 (45%)	11 (55%)	8 (40%)	12 (60%)
Secondary	35 (24%)	14 (40%)	21 (60%)	13 (37%)	22 (63%)
College/University	85 (57%)	30 (35%)	55 (65%)	21 (25%)	64 (75%)
Employment states					
Retiree	5 (3%)	3 (60%)	2 (40%)	2 (40%)	3 (60%)
Students	27 (18%)	9 (33%)	18 (67%)	8 (30%)	19 (70%)
Unemployed	25 (17%)	10 (40%)	15 (60%)	9 (36%)	16 (64%)
Employed	93 (62%)	34 (37%)	59 (63%)	24 (26%)	69 (74%)
Living with HIV					
Yes	15 (10%)	8 (53%)	7 (47%)	7 (47%)	8 (53%)
No	135(90%)	49 (36%)	86 (64%)	34 (25%)	101 (75%)
Use drugs					
Yes	12 (8%)	7 (58%)	5 (42%)	5 (42%)	7 (58%)
No	138(92%)	49 (36%)	89 (64%)	35 (25%)	103 (75%)
Transact Sex					
Yes	7 (5%)	4 (57%)	3 (43%)	3 (43%)	4 (57%)
No	143(95%)	51 (36%)	92 (64%)	37 (26%)	106 (74%)
Risk for severe COVID-19					
Might be at increased risk	27 (18%)	12 (44%)	15 (56%)	9 (33%)	18 (66%)
At increased risk	11 (7%)	5 (45%)	6 (55%)	4 (36%)	7 (64%)
Little or no risk	112 (75%)	37 (33%)	75 (67%)	27 (24%)	85 (76%)

inadequate health literacy and inability to access services due to low socioeconomic level and lack of technological competency. Prior research found that people in need of antiretroviral medicine, sexual and reproductive health services [7] and tuberculosis treatment among other things had difficulty getting care during the COVID-19 pandemic.

The use of alternative care appears to have assisted in closing the gap that the pandemic caused in access to traditional healthcare for groups that are macro-socially disadvantaged. Widespread stigma, discrimination along with restrictive laws, policies, state and non-state violence, harassment and the criminalization of behaviour or practical have collectively created challenges in accessing care for the population. Therefore, it is plausible that the macro-socially vulnerable population found the use of alternative medical healthcare services to be a convenient choice during the pandemic possibly due to their prior familiarity with navigating these spaces to access health care. Individuals in need of chronic care in locations without well-established alternative healthcare providers may have faced additional challenges in getting healthcare

during the pandemic.

The new study's findings show that certain groups in dire need of medical care may have been missed during the pandemic's initial wave. This includes younger people, men and those with a secondary level of education who encounter difficulties acquiring vital prescriptions for serious health issues. People with secondary education were also less likely to use alternative treatments. However, more research is needed to expand on this discovery.

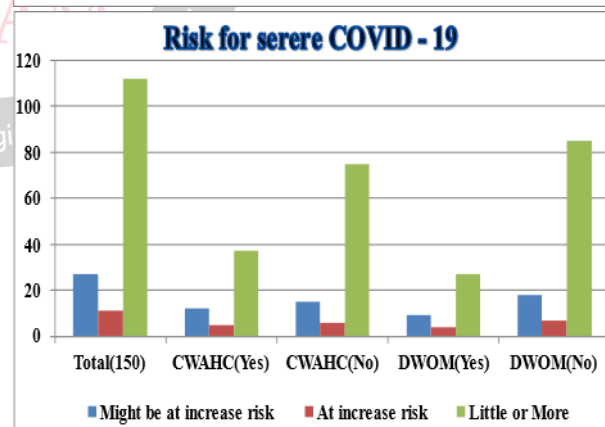
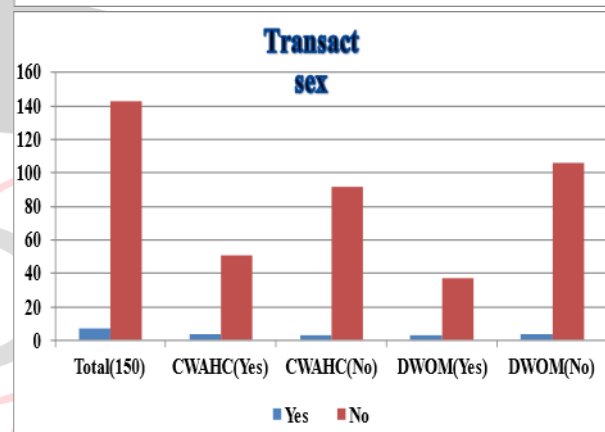
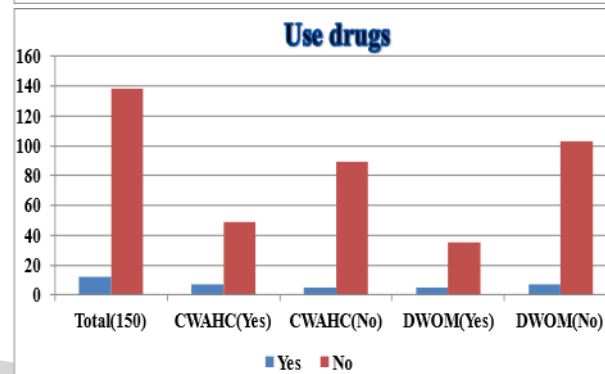
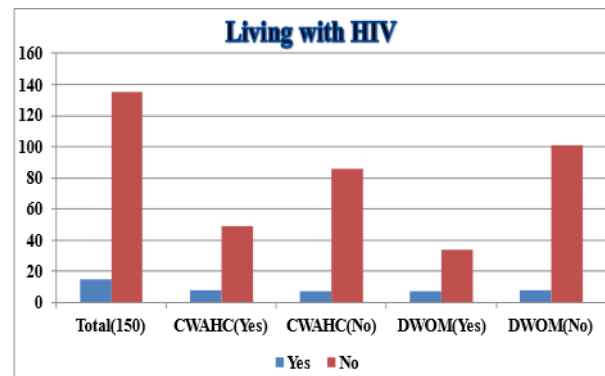
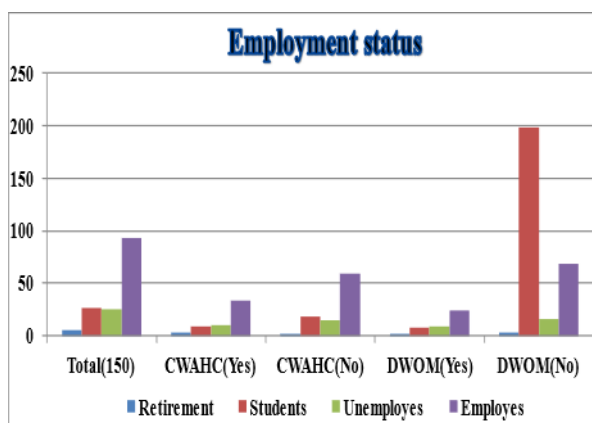
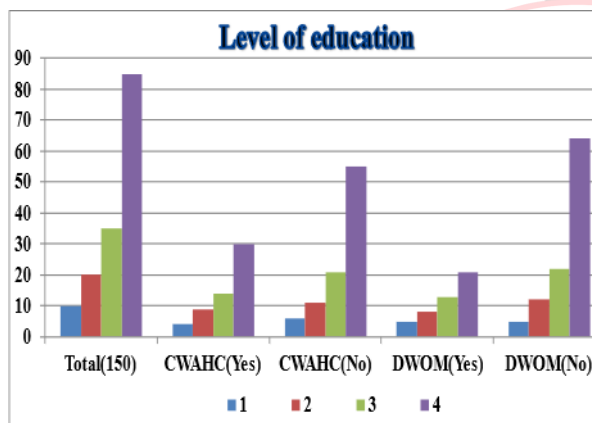
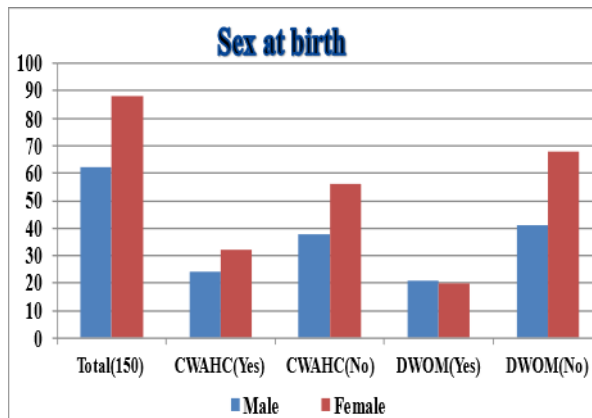
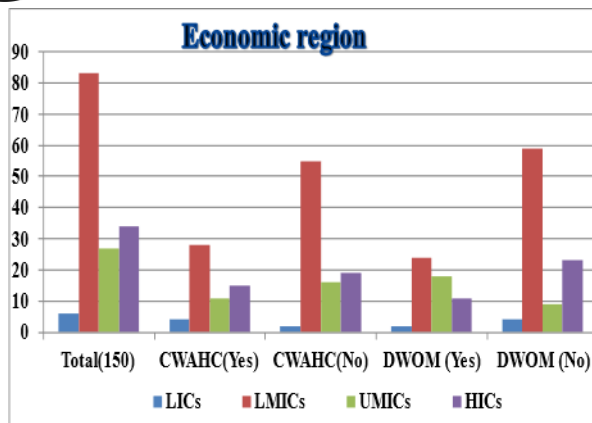


Fig.1. Represents Economic region, Sex at birth, Level of education, Employment status, Living with HIV, Use drugs, Transact Sex, Risk for severe COVID-19.

V. CONCLUSION

In conclusion, our findings suggest that the nation of residence may operate as a moderating factor in access to healthcare, drugs and alternative medical care services. We discovered that people living in LICs not only had

difficulty accessing healthcare and getting prescriptions but they also looked to be less likely to use alternative medical care providers. According to the study findings, they had less difficulty accessing healthcare than LICs and UMICs during the first wave of the COVID-19 pandemic. Contrary to popular belief, despite the fact that people in UMICs, a region with a healthcare profile comparable to that of HICs, face more obstacles in accessing healthcare and getting pharmaceuticals than people in HICs they appear to face fewer challenges in employing alternative medical care. Alternative medicines appear to be more popular in middle-income nations even though their presence in these countries is overstated. Similarly, those with critical care needs in LMICs appeared to have fewer barriers to healthcare than those in HICs throughout the pandemic. This could be because the COVID-19 pandemic health-related crisis was less severe in this region than in HICs. As a result, the number of persons leaving the traditional healthcare system was reduced. There is also the view that categorizing countries based on their affluence creates an inaccurate picture of their global health response capacity. Future research is needed to investigate the reported disparities in healthcare access between nations depending on income during the pandemic.

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