

Socioeconomic and Health Perspectives on the Quality of Life of Patients with Non-Communicable Diseases During the COVID-19 Pandemic: A Systematic Literature Review

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Abstract

The pandemic's immediate effect is shown in the large number of Covid-19 infections and fatalities caused by Covid-19. The Covid-19 epidemic has also had a substantial influence on the quality of life of people with non-communicable illnesses, with potentially detrimental repercussions for psychological balance and social and economic interactions. The goal of this research was to conduct a socioeconomic and health-related literature evaluation on the quality of life of patients with non-communicable illnesses during the COVID-19 epidemic. This research method employs a systematic review of the literature, with databases such as Scopus, Ebsco, PubMed, Google scholar, and SAGE being used. Databases were chosen based on articles published between 2020 and 2022 that contained the keywords Quality of Life, Non-Communicable Diseases, Pandemic, Covid 19, Social, and Economics. The study's findings indicate that the Covid-19 epidemic has exacerbated inequality and may worsen the effect of disease or an unanticipated circumstance on disadvantaged populations owing to economic and social policy uncertainties. The fall in the quality of life of non-communicable illness patients during the Covid-19 pandemic has the potential to be less severe than it was before to the epidemic. The reduction in the quality of life of people with non-communicable illnesses during the Covid-19 epidemic cannot be disentangled from economic, social, and health developments.

Keywords: Pandemic; Covid-19; Life Quality; Socioeconomic, Non-Communicable Diseases.

1. INTRODUCTION

It is critical to understand how populations of individuals with non-communicable illnesses, particularly in badly impacted nations, responded to a large pandemic outbreak during the COVID-19 pandemic. Self-isolation may have psychological effects, and some individuals see this as a bad mental state that might jeopardize psychological equilibrium and have an effect on social and economic interactions (Bonichini & Tremolada, 2021).

The Covid-19 epidemic has been one of the most trying times in the history of all nations affected, including Indonesia. Not only did the pandemic have a direct influence on health, but also on other facets of life, including economic and social issues.

Social constraints and regional quarantine regulations have the potential to restrict the community's ability to conduct economic activity, hence impeding the flow of goods and services. This state persisted for an extended period of time, resulting in a slowdown in economic growth in places affected by the Covid-19 epidemic. Other economic consequences, such as an increase in the unemployment rate, will follow the decline in economic growth (Djalante et al., 2020). Economic consequences of the Covid-19 epidemic may then have ramifications in other areas, such as social.

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Globally, the burden of the novel coronavirus disease 2019 (Covid-19) continues to grow, particularly in poorer nations. While some countries and regions have seen increases in patient care and mortality rates, Covid-19 continues to be a major concern for the world's vulnerable and underserved populations. Sufferers with risk factors for chronic disease have a lower quality of life and are more susceptible to health complications. societal and economic considerations resulting from major decreases in health care access (Singh et al., 2020)

The pandemic phase of Corona Virus Disease-19 (Covid-19) impacts all activities, from the vast sweep of government to the smallest social area, namely the home. One of the most noticeable symptoms of non-communicable illnesses is the restriction of social activities. Patients with chronic conditions who are often seen at health facilities for regular health checks are upset. As a consequence, it is required to adapt to diverse everyday activities, alter the economy, deal with boredom, address health and safety issues, and deal with the uncertainty surrounding the conclusion of the Covid-19 epidemic. This may be a source of everyday stress, impairing one's quality of life. (Alves et al., 2022).

NCDs are the main cause of mortality worldwide. According to the WHO, 40 million individuals worldwide were diagnosed with non-communicable illnesses in 2016, with the primary causes being cardiovascular disease, cancer, chronic respiratory disorders, diabetes, and accidents. In accordance with worldwide trends, NCDs account for 73% of fatalities in Indonesia, with adults accounting for 26% of deaths. In direct proportion to Southeast Asia, the Western Pacific area had a growth of 2.3 million (21.1 percent) in population from 8.6 million in 2000 (Depkes RI, 2018).

The Ministry of Health's data on non-communicable illnesses revealed the following findings: Asthma prevalence decreased from 4.5 percent to 2.4 percent in the population of all ages; cancer prevalence increased from 1.4 to 1.8 per mile; stroke prevalence increased from 7 to 10.9 per mile in the population aged 15 years; chronic kidney disease prevalence increased from 2.0 to 3.8 per mile in the population aged 15 years; and diabetes mellitus prevalence increased from 6.9 percent to 10.9 percent in the population aged 15 years (Depkes RI, 2018).

The Covid-19 epidemic has had a profound influence on the physical, psychological, and environmental quality of human existence. The Covid-19 epidemic has a direct effect on health. In terms of health, the Covid-19 pandemic has had a significant effect because to the large number of positive cases and fatalities caused by Covid-19. According to the WHO, Covid-19 has become an epidemic in more than 220 countries in the roughly two years following the initial infection case in Wuhan, China, with positive cases totalling 160 million individuals and fatalities exceeding 31 million (Marzouqi et al., 2021). Due to the significant number of positive cases of Covid-19, the government's resources, both central and regional, have been focussed on combating the

virus. As a consequence, health services other than Covid-19 are harmed, including those for non-communicable illnesses (Moynihan et al., 2021). Furthermore, the reduction in health services is impacted by the attitude of health service consumers who are concerned about their ability to get health care.

Apart from its influence on the health sector, the Covid-19 pandemic has had a significant impact on other facets of life. However, the most tangible influence is noticed in the economic realm. Fernando & Mckibbin (2021) predicted that all nations affected by the Covid-19 epidemic would see economic growth drop at varying rates, depending on the measures followed and the population. The economic slowdown that occurred during the Covid-19 epidemic was mostly due to changes in the distribution and demand for goods and services as a result of the policy of restricting activity (Rohmi et al., n.d.). May (2020) said that the global economy is expected to contract by up to 3% in 2020, but then grow by roughly 5.8% in 2021. Additionally, underdeveloped countries are projected to suffer a greater economic burden than developed nations (Aeni, 2021).

II. METHOD

Databases

The following databases were utilized to locate publications for this systematic review: Scopus, Ebsco, Pubmed, Google Scholar, and Sage. Additional publications were included in this systematic review based on the studies that were eliminated.

Keywords & Search Terms

Boolean operator to look for papers published between 2020 and 2022 that include the following keywords and search terms: "Quality of Life" OR "Non-Communicable Diseases" OR "Pandemic" AND "Covid 19" and "Social" or "Economic" indices.

Selection of Articles

This systematic review was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology and checklist published in 2009. The researchers collected a total of 8840 papers from all electronic research databases. Following an initial screening utilizing the inclusion criteria, the remaining 105 papers were accepted. The second filter step resulted in the selection of 36 articles, and before proceeding to the critical evaluation stage, the remaining 20 articles were reviewed in light of the systematic review's research questions and goals.

During the article screening process, three reviewers were assigned to identify titles, abstracts, and keywords that satisfied the inclusion criteria. The reviewers justify their inclusion of the research in this systematic review. Following that, the two remaining reviewers will grade the chosen article on its ability to address the systematic review's topic or aim. To minimize the chance of faulty or non-compliant

research input, all reviewers engage in collaborative discussions to obtain agreement. PRISMA 2009's flow chart displays the selection process in further detail (Figure 1).

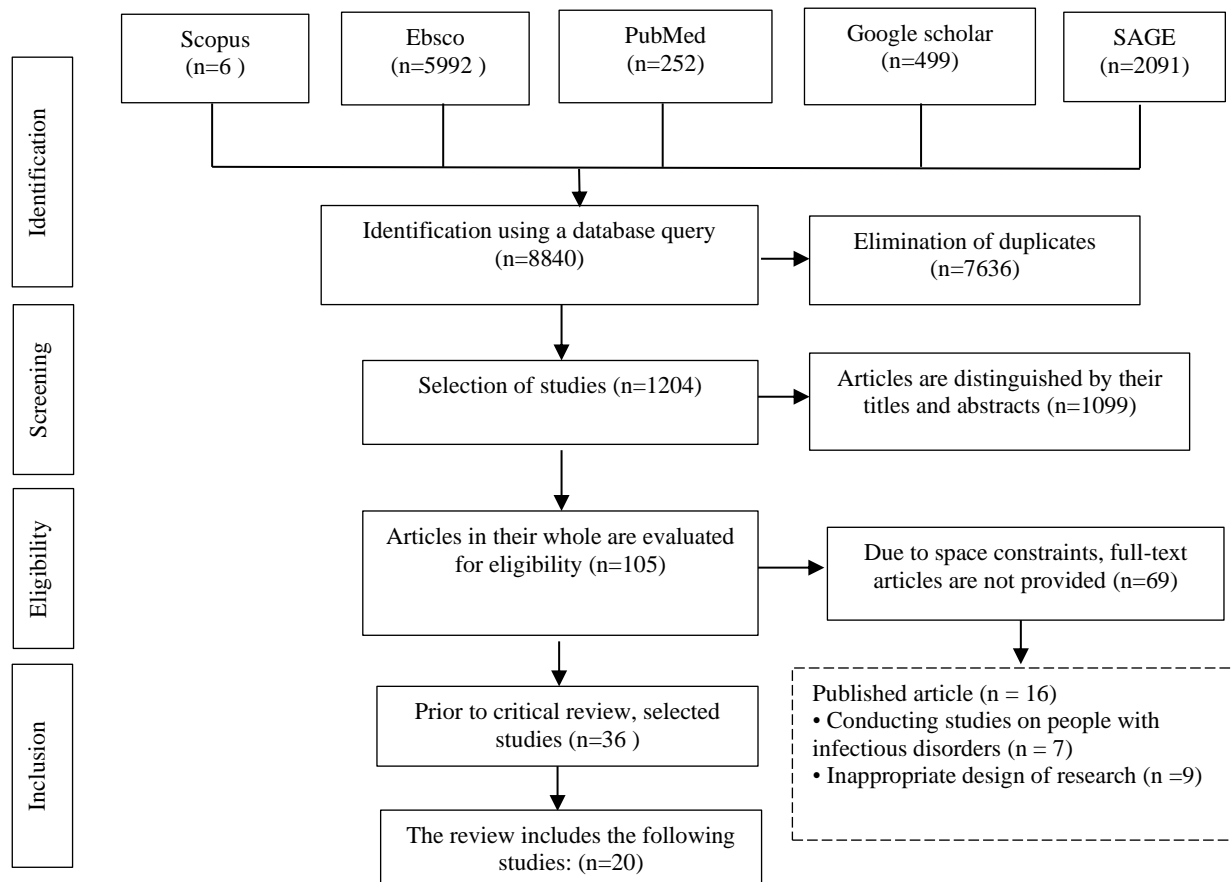


Figure 1 illustrates the PRISMA-based article selection process.

PICOS Framework

The researcher utilized the PICOS framework to discover

papers that covered a variety of topics, including population, intervention, comparison, outcome, and study design.

Table 1 outlines the PICOS framework

PICOS	Inclusion	Exclusion
Population	Non-communicable illness patients	Infectious illness patients
Intervention	-	-
Comparators	Perspectives on the Economic, Social, and Health	Beyond Economic, Social, and Health Perspectives
Outcome	Quality of Life	Aspects Physical and Psychological
Study design	Correlational research, systematic review, case study, and survey are all examples of mixed methods.	Experimental study
Year of Publication	2020-2022	Before 2020

Risiko Bias

To evaluate the quality of each research, the risk of bias was quantified using the JBI Critical Appraisal. The JBI Critical Appraisal Checklist was used to examine studies employing RCT research designs. The checklist consists of numerous questions with response options of "yes," "no," "unclear,"

and "invalid." A score of at least 50% then qualifies for a critical evaluation using a researcher-agreed cut-off point value. To minimize bias in the findings and discussion, we removed research having a score of less than 50%. Each journal in this evaluation has a JBI score of more than 50%.

Table 2. JBI Critical Appraisal

No	Title (Citation)	Criteria (if any, give “√”)													Result (%)
		1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Pandemi COVID-19: Dampak Kesehatan, Ekonomi, & Sosial (Aeni, 2021)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30
2	The Impact of Covid-19 Pandemic on the Global Economy: Emphasis on Poverty Alleviation and Economic Growth (Asare Vitenu-Sackey & Barfi, 2021)	√	√	√	√	√	√	-	√	√	√	√	-	-	76,92
3	Health-related quality of life in cancer immunotherapy: a systematic perspective, using causal loop diagrams (Beaulieu et al., 2022)	√	√	√	√	√	-	√	√	√	√	√	√	-	84,61
4	Quality of life and symptoms of ptsd during the covid-19 lockdown in Italy (Bonichini & Tremolada, 2021)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30
5	Impact of non-cardiovascular comorbidities on the quality of life of patients with chronic heart failure: A scoping review (Comín-Colet et al., 2020)	√	√	√	√	√	√	√	√	√	√	√	√	-	92,30
6	The Economic and societal burden of multiple sclerosis on lebanese society: a cost-of-illness and quality of life study protocol (Dahham et al., 2021)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30
7	Impact of disasters, including pandemics, on	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30

No	Title (Citation)	Criteria (if any, give “√”)													Result (%)
		1	2	3	4	5	6	7	8	9	10	11	12	13	
	cardiometabolic outcomes across the life-course: A systematic review (De Rubeis et al., 2021)														
8	Economic impact of avoidable cancer deaths caused by diagnostic delay during the COVID-19 pandemic: A national population-based modelling study in England, UK (Gheorghie et al., 2021)	√	√	√	-	-	√	√	√	√	√	-	√	√	76,92
9	The Role of Behavioral Economics in Improving Cardiovascular Health Behaviors and Outcomes (Hare et al., 2021)	√	√	√	√	√	-	√	√	√	√	√	√	-	84.61
10	Health economics of diabetic foot ulcer and recent trends to accelerate treatment (Jodheea-Jutton et al., 2022)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30
11	The Impact of COVID-19 Lockdown on Diabetes Complication and Diabetes Management in People With Diabetes in Indonesia (Kshanti et al., 2021)	√	√	√	√	√	-	√	√	√	√	√	√	-	84.61
12	Low uptake of COVID-19 prevention behaviours and high socioeconomic impact of lockdown measures in South Asia: Evidence	√	√	√	√	√	-	√	√	√	√	√	√	-	84,61

No	Title (Citation)	Criteria (if any, give “√”)													Result (%)
		1	2	3	4	5	6	7	8	9	10	11	12	13	
	from a large-scale multi-country surveillance programme (Kusuma et al., 2021)														
13	Systematic review and meta-analysis of patient race/ethnicity, socioeconomics, and quality for adult type 2 diabetes (Lee et al., 2020)	√	√	√	-	-	√	√	√	√	√	-	√	√	76,92
14	Impact of COVID-19 pandemic on utilisation of healthcare services: A systematic review (Moynihan et al., 2021)	√	√	√	√	√	-	√	√	√	√	√	√	√	90,30
15	Dampak Covid-19 Terhadap Ekonomi Indonesia (Yamali & Putri, 2020)	√	√	√	-	-	√	√	√	√	√	-	√	√	76,92
16	Health Literacy of Noncommunicable Disease: A Literature Review (Prasetiani, 2020)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30
17	Socioeconomic determinants of COVID-19 in Mexico (Revollo-Fernández et al., 2022)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30
18	Health, Psychosocial, and Economic Impacts of the Covid-19 Pandemic on People with Chronic Conditions in India: A Mixed Methods Study (Singh et al., 2020)	√	√	√	-	-	√	√	√	√	√	-	√	√	76,92
19	Alternatif Strategi Penanganan Dampak Ekonomi Covid-19 Pemerintah Daerah Jawa	√	√	√	√	√	√	√	√	√	√	√	√	-	92,30

No	Title (Citation)	Criteria (if any, give “√”)													Result (%)
		1	2	3	4	5	6	7	8	9	10	11	12	13	
20	Timur Pada Kawasan Agropolitan (Ulya, 2020) Health-related quality of life of hospitalized COVID-19 survivors: An initial exploration in Nanning city, China (Wu et al., 2021)	√	√	√	√	√	-	√	√	√	√	√	√	√	92,30

III. RESULT

Characteristics in General

Based on the analysis of 20 publications (Table 2), it is known that the most often performed kind of study is systematic review, with 10 articles (80%) and as many as 11 papers published in 2021. (55 percent).

Table 3 summarizes the general features of the investigations (n = 20).

Kategori	n	%
Publication Year		
2020	6	30
2021	11	55
2022	3	15
Types of research		
Mix Method	2	10
Correlational Studies	6	30
Systematic Review	10	50
Case Study	1	5
Survey	1	5
Research Perspective		
Economy - Health	4	20
Social - Health	4	20
Economy - Social - Health	12	60

Economic and social perspective

The economic element of the Covid-19 pandemic is the first metric to assess, since it involves the pace of economic growth and the unemployment rate. This syndrome is present in all parts of the globe impacted by the Covid-19 epidemic to varying degrees. Economic development has slowed mostly as a result of limits on activities or social activities. Economic development has slowed significantly as a consequence of the COVID-19 pandemic, and the resulting changes in social life have had a significant influence on the community's health state, and in certain cases, their quality of life. The fall in the quality of life of non-communicable illness patients during the Covid-19 pandemic has the potential to be less severe than it was before to the epidemic. The reduction in the quality of life

of people with non-communicable illnesses during the Covid-19 epidemic cannot be disentangled from economic, social, and health developments.

The COVID-19 pandemic has the potential to impair a patient's quality of life, either directly or indirectly. Patients and families with low earnings or no income have a disproportionately negative effect compared to patients and families with high incomes. Throughout the epidemic, the policy of restricting social activities harmed access to a variety of services, both health-related and non-health-related. This is undoubtedly an impediment for patients and families with poor economic status, since they lack the means necessary to offer health care at home owing to their inability to receive health care, and so this disease has the potential to degrade patients' quality of life. 19 in the social sphere is a surge in poverty among patients with chronic noncommunicable illnesses, which has an effect on patient productivity.

Health Perspective

The COVID-19 epidemic is spreading at a breakneck pace, leaving many nations unable to adapt and significantly decreasing the quality of human existence in a variety of ways, including physical, psychological, and environmental (Banarjee, 2020). The COVID-19 pandemic has a direct effect on health. The effect of the COVID-19 pandemic on health is the large number of positive cases and fatalities caused by COVID-19. Due to the large number of positive instances of COVID-19, the government's resources, both central and regional, have been focussed on COVID-19 response. As a consequence, health services other than those associated with COVID-19 have been harmed (Moynihan et al., 2021; Pangoempia et al., 2021; Purnamasari & Ali, 2021). Furthermore, the reduction in health services is impacted by the attitude of health service consumers who are concerned about their ability to get health care. Along with the significant number of positive cases and fatalities caused by COVID-19, the pandemic has a negative effect on health care access. According to Moynihan et al. (2021), the loss in access to health care happened internationally, ranging from

-51% to -20%. The drop in service coverage of productive age was mostly due to health institutions, particularly first-level health facilities, temporarily ceasing to provide health services. This was done because the majority of institutions had not made necessary improvements to the way health services were delivered. Meanwhile, the drop in coverage of older health care was also a result of this group's sensitivity to COVID-19 exposure. There has also been a deterioration in health care for degenerative illnesses such as hypertension and diabetes mellitus. The decline in service coverage for diabetes in 2020 is more than 40% higher than the decline in service coverage for hypertension, which has decreased by 8%.

IV. DISCUSSION

Perspective : Economy - Health

During the pandemic, health care consumption reduced by almost a third, with substantial heterogeneity and bigger decreases among those with less severe or non-communicable illness (Moynihan et al., 2021). The pandemic's influence on chronic illness care, mental health, health-related behavior, job, and family finances is significant. Sociodemographic variations that reflect inequities or gaps in knowledge and access to health care resources are critical for keeping patients' quality of life from deteriorating (Kusuma et al., 2021).

The Covid-19 epidemic has had a profound effect on the global community's lives, notably in Indonesia. Along with the health consequences, the pandemic has an economic cost (Ulya, 2020). According to data collected during the Covid-19 epidemic in India, 83% of people experienced difficulty getting health facilities, 17% reported difficulty accessing medications, 59% claimed income loss, 38% reported job loss, and 28% reported lower fruit and vegetable intake. Qualitative findings indicate that the majority of patients are experiencing psychological distress as a result of job loss or money loss and are having trouble receiving inpatient care (Singh et al., 2020).

Perspective : Social - Health

The Covid-19 epidemic is one of the dangers to the quality of life of patients with chronic non-communicable illnesses such as cancer, congestive heart failure, and multiple sclerosis. The use of health care resources, informal care, and lost productivity as a result of the Covid-19 epidemic all have an effect on a patient's quality of life. While numerous variables impact and alter a patient's quality of life (HRQoL), social support is a direct predictor of a patient's quality of life (Beaulieu et al., 2022; Comín-Colet et al., 2020; Dahham et al., 2021). In many countries, efforts to restrict social activities are being made as a method for preventing and controlling Covid-19, in order to slow the spread of cases and lower the danger of mortality. The findings indicated that individuals with non-communicable illnesses who did not work and had a low level of education

perceived a worse quality of life. During quarantine, the most often experienced feelings were melancholy (72%), boredom (54.5%), impotence (52%), and worry (50%) (Bonichini & Tremolada, 2021).

Perspective : Economic - Social - Health

The Covid-19 epidemic has wreaked havoc on the global economy, impoverishing a large portion of the world's population. Additionally, the epidemic has cast doubt on economic and social policy. Social restrictions and area quarantines enacted during the pandemic have a variety of consequences, most notably social, economic, and health-related. The COVID-19 pandemic has had a significant effect on health because of the large number of positive cases and relatively high mortality rate, as well as the drop in coverage for the majority of health services for non-Covid-19 patients or patients with non-communicable illnesses (Aeni, 2021; Asare Vitenu-Sackey & Barfi, 2021).

Numerous attempts have been made to alter the strategy utilized to enhance patient care during the Covid-19 epidemic in the form of remote patient health services; although this effort is undoubtedly beneficial, each patient's adaptation to health services is unique (Hare et al., 2021). The availability of remote health care to enhance patients' quality of life is, of course, contingent upon the availability of money or other financial variables. The economic, social, and clinical consequences of the Covid-19 disease epidemic will ultimately result in advances in health care, with a focus on therapy and the use of technology, allowing for improved health management for patients (Jodheea-Jutton et al., 2022).

Patient health-related quality of life (HrQoL) is a worldwide issue that has emerged as a result of the present epidemic. In-depth research on HRQoL provides empirical evidence for changes in quality of life across eight categories (physical symptoms, anxiety, trauma, economic loss, place-based identity, self-stigma, self-health treatments, and lifestyle modifications) (Wu et al., 2021). The study's findings indicate that the burden of the Covid-19 epidemic extends beyond the direct damage to patients in the form of changes in health status; it is also required to consider the indirect long-term consequences on health that might be deleterious (De Rubeis et al., 2021). According to research, 32,583 patients diagnosed with breast cancer, 24,975 with colorectal cancer, 6,744 with esophageal cancer, and 29,305 with lung cancer during the current Covid-19 pandemic significantly increase the risk of cancer deaths (95 percent) and productivity loss over the next five years (Gheorghe et al., 2021). Difficulties managing non-communicable diseases such as diabetes were also identified during the Covid-19 pandemic; these difficulties included attending 30.1 percent of diabetes consultations, 12.4 percent of diabetes medication access, 9.5 percent of blood glucose checks, and 23.8 percent diet control. Difficulties with diabetes management during the Covid-19 epidemic are likely to increase the risk of complications by 1.4 times (PR: 1.41, 95% CI: 1.09-1.83) (Kshanti et al., 2021). The disparity in diabetes care and

treatment results during the Covid-19 epidemic is undoubtedly due to access issues such as lack of insurance or other sources of care, nutritional satisfaction, and very poor wages, all of which contribute to lower levels of adherence (Lee et al., 2020).

Government policies on COVID-19 may have an indirect effect on the community's economy and social life (Yamali & Putri, 2020). Because the Covid-19 pandemic exacerbates inequality and may amplify the effect of a sickness or other unanticipated event, it is vital to adopt strategies tailored to vulnerable populations (Revollo-Fernández et al., 2022). Health literacy has a beneficial effect on PTM patients, is a successful and low-cost program for PTM patients, and is a method for PTM prevention at all ages during the Covid-19 epidemic. Health literacy may motivate patients to engage in self-management, so improving their quality of life, and can be delivered to all age groups. To improve their long-term health, PTM patients must be able to improve their health literacy skills (Prasetiani, 2020).

V. CONCLUSION

Numerous attempts have been made to alter the technique utilized to enhance patient care during the Covid-19 epidemic in the form of remote patient health services; although this effort is undoubtedly beneficial, each patient's adaptation to health services is unique. The disparity in patient care and treatment outcomes during the Covid-19 pandemic is due to social and economic factors such as lack of social support, lack of insurance or other sources of care, nutritional deficiencies, and extremely low incomes, all of which contribute to the patient's lower quality of life.

The true consequence of the Covid-19 pandemic is the large number of positive cases and relatively high mortality rate, as well as a reduction in coverage for the majority of health services for non-Covid-19 patients or patients with non-communicable illnesses. During the pandemic, health care consumption reduced by roughly a third, with substantial heterogeneity in patient characteristics according to illness, and the fall was considerably larger among those with less severe or non-communicable disease.

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