Building Healthcare Sector in Post-Pandemic Era: Potential Role of Islamic Social Finance

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Abstract: *Islamic social finance instruments can be adopted to restore and achieve a healthy life and promote welfare after COVID-19, integrated with SDGs number three. As Islamic social finance instruments, Zakat, Infaq, Sadaqah, and Waqf play a significant role in solving marginalization and vulnerability that focus on local programs, thus impacting social and economic inclusion. Using a literature review approach, the objective of this paper is to examine the role of Islamic social finance instruments as alternative funding to achieve Sustainable Development Goals (SDGs) number three, "Good Health and Well-being," which is also in line with the recovery of COVID-19 in the healthcare sector. The results of this study indicate that Islamic Social Finance can solve the problem of economic funding due to the COVID-19 pandemic. In the short term, building and repairing primary health facilities, providing affordable health services, and providing access to health insurance for people experiencing poverty are actions that need to be realized immediately. As for the medium term, post-COVID-19, mental recovery and consultation efforts must be intensified. Investments in technology for telemedicine or telemedicine facilities and reforms in the post-pandemic COVID-19 health sector must be addressed and pursued. Based on current findings, this study recommends a synergy for all countries to jointly achieve the SDG number three target while restoring global socio-economic conditions post-COVID-19.*

Introduction

The SARS-CoV-2 or coronavirus disease 2019 (COVID-19), which recently emerged from Wuhan (China) in December 2019, has infected 39,596,858 people and has caused the deaths of more than 1,107,374 worldwide as of October 18th, 2020 (WHO, 2020). This virus has a broad impact on human life and the economy (Leite, Lindsay, and Kumar, 2020). The total global economic cost due to this pandemic is up to USD 8.8 trillion (Baig, Butt, Haroon, and Rizvi, 2020). The COVID-19 outbreak also led to a mandatory closure policy and lockdown by the Government (Heyden & Heyden, 2020).

The Government's policies have changed the socio-economic life of society, such as the way people work. The existence of a pandemic means that people no longer need to go

to work because people can work from home (Qureshi, 2020). Furthermore, the problem that arises from this is the existence of socio-economic disparities, in which the poor cannot work due to limited transportation for mobilization. On the other hand, working at home requires additional fees for adequate internet access. The lockdown is the Government's effort to reduce the spread of the COVID-19 virus. However, this also has an impact on decreasing economic activity and community productivity. Smith (2020) reveals that the lockdown has significantly disadvantaged the poor due to losing their livelihoods.

The COVID-19 pandemic's presence can cause panic, and fear, and encourage people to seek help from public healthcare centers (Ceylan, Ozkan, and Mulazimogullari, 2020). It can increase the density of services, further leading to problems for the public health services ecosystem. Finally, the hospital emergency room became overcrowded due to limited capacity, while demand continued to increase. It can create a vicious circle. Furthermore, Leite et al. (2020) explain that excess patients in the emergency department can encourage more comprehensive transmission in the community. The threat of transmission of this virus makes medical workers unable to do much, but it requires awareness from the community itself to protect itself to reduce the level of spread of the virus. Therefore, social interventions encouraged and supported by the public health sector must be put in place to prevent the spread of COVID-19 (Mannelli, 2020).

The Government needs to make effective policies to prevent the spread of COVID-19, but the policies taken must include health education elements that are suitable for the community (Khalid & Ali, 2020). The presence of COVID-19 has had an impact on healthcare systems in several countries (Boccia, Ricciardi, and Ioannidis, 2020). Therefore, it is crucial to prepare public health services with adequate medical personnel to provide adequate health services during the COVID-19 and post-COVID-19 pandemic. Bastani, Sheykhotayefeh, Tahernezhad, Hakimzadeh, and Rikhtegaran (2020) found that every year there are tens of millions of patients around the world who suffer injuries or deaths due to unsafe medical practices and services. Based on this study, also found that one in ten patients was harmed because these effects should have been prevented by obtaining health care in high-tech hospitals. Not much is known about the risk of unsafe treatment in non-hospital settings, where some services are not provided (Jha, Larizgoitia, Lopez, Plaizier, Waters, and Bates 2013). Furthermore, Elmontsri, Banarsee, and Majeed (2018) explained that the risk of injury to patients in developing countries is more significant because of limited infrastructure, technology, and human resources.

According to Leite et al. (2020), the bubonic plague in 1347-1351, yellow fever in the 1800s, Spanish flu in 1918-1919, and recently COVID-19 have caused high mortality rates worldwide. Unlike previous pandemics, healthcare management for the COVID-19 outbreak can employ new technologies for preventive measures, triage of early symptoms, self-isolation, quarantine, and return to social interactions.Cepiku, Giordano, Bovaird, and Loeffler (2020) state that after the initial outbreak is over, there will be an increase in demand for medical action in the form of intensive care in emergency departments with scarce equipment. It will encourage the construction of a temporary hospital. However, some countries are trying to make patient recovery self-care and delay the hospitalization of patients without high-risk or other chronic diseases. These efforts need to be systematically supported and coordinated by public services to run effectively and efficiently.

The COVID-19 pandemic is a global challenge that impacts health and well-being,

demanding researchers, policymakers and governments to address and resolve it. It is in line with the Sustainable Development Goals (SDGs) which focus on the relationship between development policy sectors, where the pandemic has increasingly shown a complex global dependence that can sustain the economy without paying attention to ethnicity, economy, society and gender.

Based on Lambert et al., (2020), the COVID-19 pandemic shows that several challenges arise to achieve SDGs, including (1) food systems; (2) education; (3) sustainable cities and infrastructure, (4) security; (5) prolonged conflict, refugee crisis and forced displacement; (6) environmental resilience; (7) and global health. The most visible and felt challenge is the impact on the health sector, in which the Government does not only focus on reducing health impacts but also focuses on building sustainability and strengthening resilience for post-COVID-19 pandemic recovery. Sustainable health and recovery after the COVID-19 pandemic is the SDGs number three that must be realized by 2030. As one of the SDGs, all people of all ages must ensure their health and well-being under the World Health Organization (WHO), which is also an integral part of the other 16 goals.

Several studies discuss the relationship of Islamic finance to the SDGs. Such as research conducted by Ahmed, (2004), Yumna & Clarke, (2009) Mohsin, (2013), Hoque et al., (2015), Ahmed et al., (2015), Ambrose et al., (2015), Jaelani, (2016), Shaikh, (2016), Gundogdu, (2018), Meerangani, (2019) Usman & Rahman, (2020), and Bilo & Machado, (2020). Almost all of them reveal that SDGs are in line with the philosophy of Islamic finance so that SDGs can be achieved with Islamic finance as a financial alternative (Abduh, 2019). The 17 SDGs focus on improving the quality of life for people and the environment. Furthermore, to achieve human welfare, the SDGs points are divided into two broad categories: the ultimate goal of development and how to achieve that ultimate goal. SDGs numbers 1, 2, 3, 4, 5, 8, and 10 fall into the categories below. As for the other SDGs, it is included in the last category. As for SDGs number three, namely achieving good health and well-being, several countries have pursued this goal for several years because this goal is included in final development goals. However, the efforts made by several countries in the world have not proceeded with optimal results. It is due to funding problems that still use the conventional capitalist system. Funding with a conventional capitalist system is seen as incompatible with the spirit of helping to help humankind without any hope of reward from the person being helped (Gundogdu, 2018). Besides, this system also aims to get the maximum benefit from the assistance provided.

If conventional finance only offers loans as a source of funding, then it is different from Islamic finance which has many diversified financing models, both business and social. Islamic social finance instruments that can be used as alternative financing for achieving the SDGs are *Zakat, Infaq* (donation) and *Waqf* (ZISWAF). *Zakat* and *Waqf* as Islamic social finance instruments play a significant role in solving marginalization and vulnerability that focus on local programs, thus impacting social and economic inclusion (Ahmed et al., 2015; Afrimaigus & Renata, 2022). The collection of *Zakat* globally, according to the Islamic Development Bank, reaches $ 230 billion and $ 560 billion annually. *Zakat* can be used as a funding source after the COVID-19 pandemic and reaches SDGs number three. Besides, *Waqf* can also support the recovery of social and economic conditions after COVID-19.

Financial assets are an essential component to restoring and achieving a healthy life and promoting welfare for all people after COVID-19, integrated with SDGs number 3. The

goal of SDGs number three is in line with the current global goal of facing the COVID-19 pandemic, namely health recovery and achieving good health and well-being for all humankind. Lambert et al. (2020) state that the COVID-19 epidemic has the same goal as SDG number three, which is related to global health issues. The existence of this pandemic does not only encourage efforts to tackle public health but also to build sustainability and strengthen resilience for future recovery.

Ashford, Hall, Quirogam, Metaxas, and Showalter (2020) explained that several countries had previously attempted to achieve SDGs number three using the capitalist system, but the results were unsatisfactory. Among the many studies on Islamic finance's role in the recovery from the COVID-19 pandemic and the SDGs' achievement, in the authors' best knowledge, research that focuses on the role of Islamic social finance instruments to solve this problem is still limited. Therefore, this study explores Islamic social finance instruments' role in preparedness, resilience, and recovery post-pandemic, which is integrated with SDGs number three, namely "Good health and well-being".

The research structure is divided into several parts. The introduction is the opening part of this research, which is followed by a discussion of the targets and indicators of the three SDGs, Islamic social finance instruments, and the role of Islamic social finance instruments in the preparedness, resilience and recovery of the COVID-19 pandemic and also the achievement of the SDGs. Furthermore, in the third part, a conceptual framework will be discussed regarding the role of Islamic social finance instruments in supporting the recovery from COVID-19 and achieving the third point of the SDGs. The research closes with a conclusion in the fourth section.

Method

This study is exploratory and aims to explore the potential role of Islamic social finance instruments towards post-pandemic healthcare and SDGs number 3 (Good health and well-being) achievement. In this study, papers from Elsevier's Scopus Database are retrieved and analyzed with the keywords "COVID-19 and Healthcare". The papers are peer-reviewed articles that appear in the first 200 papers listed by the database and mention any problems, challenges, and opportunities faced by the healthcare sector in the ongoing COVID-19 pandemic. Meanwhile, Islamic Social Finance and Sustainable Development Goals literature is also taken from Elsevier's Scopus Database and UN Document. After literature analysis, a list of healthcare problems and potential solutions from ISF is elaborated in the next section of this paper.

Result and Discussion.

Table 1 explains our findings related to articles that identify the health sector's capacity, the government's readiness, and the community's health conditions in facing COVID-19. The table contains the authors, findings, and the journals that published each article. We provide explanations in tabular form to make it easier for readers to understand the health sector's condition and the government's readiness to face the COVID-19 pandemic. This condition can be a reference for the future of organizing and managing the health sector both in the post-pandemic period and during a health crisis. Then, we explain the potential role of Islamic social finance in solving the healthcare sector's problems.

Table 1. Publications by Authors, Findings, and Journals

No	Authors	Findings	Journals
1	Abedi et al. (2020)	The relationship between COVID-19 cases and fatalities concerning race, health, and economic status in the U.S.	Journal of Racial and Ethnic Health Disparities
2	Zhao et al. (2020)	Lower hospital accessibility for low-income communities in Beijing.	Health and Place
3	Qureshi (2020)	Socioeconomic injustice influences community health levels.	Information Technology for Development
4	Wasdani & Prasad (2020)	Social distancing is challenging in slum areas without adequate economic support.	Local Environment
5	Henning-Smith (2020)	Elderly individuals in rural areas of the U.S. are at greater risk of COVID-19 compared to those in urban settings.	Journal of Aging and Social Policy
6	Banik et al. (2020)	The mortality rate of COVID-19 is affected by healthcare systems, population characteristics, and governmental measures.	Global Business Review
7	Connor et al. (2020)	Differences in health care treatment based on gender during the COVID-19 pandemic.	Social Science and Medicine
8	Watson et al. (2020)	The pandemic resulted in shared trauma and heightened disparities in access to healthcare.	Family Process
9	Leite et al. (2020)	Telemedicine is crucial for controlling pandemics and safeguarding data privacy.	Public Money and Management
10	Khilnani et al. (2020)	Digital health service access disparities exist during the pandemic.	Journal of Information, Communication and Ethics in Society
11	Jumreornvong et al. (2020)	Individuals with disabilities face an increased risk of COVID-19; telemedicine is essential for accessing healthcare.	Disability and Society
12	Bastani et al. (2020)	Medical ethics must safeguard patients and healthcare personnel throughout the pandemic.	International Journal of Health Governance
13	Mannelli (2020)	The pandemic triggered debates on patient prioritization and medical ethics in healthcare facilities.	Journal of Medical Ethics
14	Gómez-Salgado et al. (2020)	The pandemic increased mental strain on healthcare workers	Sustainability (Switzerland)
15	Vagni et al. (2020)	Healthcare workers treating COVID-19 are at high risk of stress and trauma.	Sustainability (Switzerland)
16	Felice et al. (2020)	Many healthcare workers tested positive for COVID-19, most	Journal of Community Health

		asymptomatic, and require psychological support.	
17	Propper et al. (2020)	The pandemic increased resource demands and waiting times in healthcare services.	Fiscal Studies
18	(Pikoulis et al., 2020)	Strengthening primary healthcare mobility and equipment is crucial for COVID-19 mitigation.	Safety Science
19	Leite et al. (2020)	The pandemic disrupted healthcare systems operationally and economically, requiring rapid adaptation.	TQM Journal
20	Litewka & Heitman (2020)	Health system limitations in Latin America worsened the pandemic's impact.	Developing World Bioethics
21	Stockwell et al. (2020)	Alcohol consumption worsened the healthcare burden during the pandemic; stricter regulations are needed.	Drug and Alcohol Review
22	Eissa (2020)	The pandemic highlighted the need for investment in sustainable healthcare systems.	Economies
23	Giang et al. (2020)	Adequate healthcare systems reduce mortality, particularly among the elderly.	Sustainability (Switzerland)
24	Liu (2020)	Inter-regional patient evacuation in China effectively mitigated early pandemic mortality spikes.	International Journal of Health Policy and Management
25	Auener et al. (2020)	The pandemic offers opportunities for health sector reforms to ensure sustainability.	International Journal of Health Policy and Management
26	Kruse & Jeurissen (2020)	For-profit hospitals were financially impacted during the pandemic, highlighting the need for reserves.	International Journal of Health Policy and Management
27	Shokoohi et al. (2020)	Western health systems were more vulnerable to COVID-19 compared to East Asian countries.	International Journal of Health Policy and Management
28	Khalid & Ali (2020)	Limited testing and healthcare infrastructure in Pakistan increased pandemic risks.	Asian Bioethics Review
29	Cepiku et al. (2020)	Community-based approaches are more effective for pandemic prevention.	Public Money and Management
30	Dennerlein et al. (2020)	A comprehensive worker health approach (TWH) is essential during the pandemic.	Human Factors
31	Nydegger & Hill (2020)	COVID-19 worsened racial health disparities and chronic conditions among African Americans.	International Social Work

32	Ceylan et al. (2020)	COVID-19 caused two-way economic and social impacts globally.	European Journal of Health Economics

Source: compiled from various sources

The total global economic cost due to this pandemic is up to USD 8.8 trillion (Baig et al., 2020). Currently, governments worldwide are still looking for alternative development funding for health facilities from COVID-19 to post-COVID-19. The amount of funding needed to develop the health sector after COVID-19 can be funded using Islamic social finance instruments, such as *Zakat, Infaq, Sadaqah*, and *Waqf*. The potential for *Zakat* and *Waqf* globally in a year can reach USD 1 trillion and USD 500 billion so that the amount of this potential can be allocated to solve the problem of post-COVID-19 health infrastructure development (Abduh, 2019).

Furthermore, based on the findings in the table above, we will discuss implementing the potential for Islamic social finance instruments to restore and achieve a healthy life and improve the welfare of all people after COVID-19, integrated with SDGs number three, namely "Good health and well-being." In order to achieve this goal, governments need to focus on solving existing problems, both in the short and medium term and in the long term. According to Pikoulis et al. (2020), in the short term, the Government needs to pay more attention to and improve primary health center facilities so that people with low incomes can easily reach them and do not need transportation costs. In this case, primary health centers are community health centers (Puskesmas) located in each village. Furthermore, improvements in facilities also need to be carried out so that various types of diseases can be handled in primary health centers so that more people can reach these facilities.

Furthermore, Zhao et al. (2020) also highlighted the differences in the accessibility of primary, secondary, and tertiary hospitals for low-income and high-income people. This difference in access makes low-income people more vulnerable to inadequate health care. Banik et al. (2020) also revealed that people experiencing poverty find it difficult to reach the healthcare system, so they are more susceptible to disease. In this regard, ISF is an essential financing alternative that provides affordable prices for those included in the ashraf, or they can even get free health facilities. Construction of primary health care center infrastructure or the required resources can use *Waqf* funds. The operation of this health center can be funded using *Waqf* or *Zakat* systems for poor people.

Apart from *Zakat* and *Waqf*, *Infaq* and *Sadaqah* are ISF instruments that can achieve targets to restore and achieve a healthy life and improve the welfare of all people after COVID-19, integrated with SDGs number three. However, because infaq and sadaqah are voluntary, their potential will not be optimal if the economically prosperous and most fortunate people can increase a sense of togetherness and brotherhood (*ukhuwah*). The advantage of *Infaq* and *Sadaqah* is that they can attract non-Muslim people to channel their funds. Currently, the Muslim population worldwide reaches 1.9 billion; if half of the Muslim population has paid *Infaq* and *Zakat*, the goal is to restore and achieve a healthy life and improve the welfare of all people after COVID-19, integrated with SDGs number three can be achieved (Abduh, 2019).

ISF has excellent potential and aligns with the target to restore global socio-economic conditions post-COVID-19. It is consistent with a World Bank report, which states that it reports that the collection of *Zakāt* in Indonesia and Malaysia has increased by 32 times and

22 times, respectively, in ten years (Abduh, 2019). However, there were several challenges in raising these funds. The main challenges faced are related to donors' trust in managing and distributing funds. Therefore, the *ZISWAF* institution needs to improve its quality with public audits in terms of financial reports and regular implementation mechanisms. Second, incentives and appreciation for payers. The Government must recognize the contribution made by the payer and reward them. One of them is implementing a tax incentive scheme.

Repair and construction of primary health centers aim to facilitate access for low-income communities, where people with these conditions can be categorized as low (*al-fuqarā'*) and needy (*al-masākin*). Based on this, the community has met the requirements to receive *Zakat*, especially if they experience health problems that require treatment. Furthermore, concerning the eight classifications (*ashnaf*) of *Zakat*, each Government has the authority to divide the portion of one-eighth portions, either divided equally or prioritizing one *ashnaf* according to the conditions or phenomena that occur. The distribution of *Zakat* does not have to be in the same country or region. *Zakat* can be distributed to various regions, requiring the recipient's origin to be included in the specified *ashnaf* (Abduh, 2019).

In the context of psychological stress due to COVID-19, Gómez-Salgado et al. (2020) found that the health crisis due to COVID-19 also impacts the community's psychological pressure, especially on health workers. Uncertainty in disease management and health protocols often changes into causes of psychological distress for health workers. The study results found that 80.6% of health workers experienced psychological pressure, even though maintaining the mental health of health nurses is very important so that COVID-19 can be handled effectively. In the same year, Vagni et al. (2020) also found that health workers involved in handling COVID-19 can be exposed to high stress and exposure trauma levels. Concerning mental health after COVID-19, ISF can be an alternative funding source for infrastructure development to support a consultation system, such as telemedicine. The existence of telemedicine can help provide services, from enabling virtual triage to reducing the adverse psychological effects of social isolation.

Furthermore, the Government also needs to make efforts to provide telemedicine to fulfill health services for people around the world. With remote consultation, it will be easier for patients to access health services. Hospitals sometimes have so many patients that the waiting list for medical consultations takes a long time. The existence of telemedicine can save time and money. As a financing alternative, ISF needs to focus on developing these health facilities. However, it must be ensured that the privacy of all parties is maintained through data security protection laws (Leite et al., 2020). Besides telemedicine, ISF can also pay for all medical equipment, resulting in better health services and faster treatment times.

In the medium term, post-COVID-19 conditions can create a resource crisis in the health sector, particularly human resources. Therefore, governments worldwide need to reform the post-pandemic health sector. Human resources need to be prepared to prevent human resources crises. In this case, the ISF can encourage scholarships for medical personnel as an effort to prepare for post-COVID-19. *Zakat* and *Waqf* funds can be given to medical personnel through scholarships. It has also been done by several *Zakat* or *Waqf* worldwide, such as the educational *Waqf* implemented by Al Azhar University (Mahamood and Rahman, 2015).

In the long term, the Government must also restructure health services, particularly insurance. Turkey's gathering of private-sector employees, public-sector employees, and

employers, originally represented under three different public insurance systems under one roof, the Social Security Institution, is one of the first steps affecting the health services provided in the country (Visconti et al., 2017). Institutional integration allows all members to benefit from both public and private hospitals. Social Security Institutions cover about 99% of Turkey's population. It shows that the Government needs to increase insurance, especially for low-income people, to access health services in the future. In this regard, the ISF can be used as a source of funding for insurance coverage for people with low incomes.

Conclusion

Islamic social finance, such as *Zakat, Infaq, Sadaqah*, and *Waqf*, can considerably help achieve the "Good Health and Well-being" goal (SDGs 3) and lessen the socioeconomic effect of COVID-19. These important tools offer alternative financing to significantly upgrade healthcare infrastructure, including primary health centers and telemedicine systems, and this guarantees access for low-income populations (*al-fuqarā'* and *al-masākin*). The existence of telemedicine can help provide services, from enabling virtual triage to reducing the adverse psychological effects of social isolation. Better primary healthcare facilities and telemedicine will soon lower transportation costs and mental stress, and scholarships for medical staff will help address medium-term workforce shortages. Health service reorganization, especially insurance options for low-income people, should be prioritized in long-term ISF-funded strategies. Governments should adopt policies like *Zakat* payment guidelines and original ISF fundraising strategies. This will guarantee continued financial support. This research advocates for global collaboration, regional partnership, like those via ASEAN or OIC, and the incorporation of ISF into national health frameworks to enhance its capabilities, meet SDGs, and revive global socioeconomic circumstances after the pandemic.

Acknowledgments

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