RESEARCH BRIEF

COVID-19 Pandemic and Israeli Bombings in Gaza Strip: Double Disaster to a Failing Healthcare System in Palestine

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Palestine, a small state on the eastern coast of the Mediterranean that is inhabited by more than four million Palestinians, has experienced devastating and rapid-fire bombings in Gaza by the Israeli military in the middle of a global public health emergency. The ongoing coronavirus disease 2019 (COVID-19) pandemic and the 11-day Israeli-Palestinian conflict, which lasted from May 10, 2021 to May 21, 2021, took place against a history of inadequate access to healthcare, the substandard quality of existing treatments, and long-standing Israeli occupation of the Palestinian territories. This double disaster has resulted in a severe breakdown in the health status of the Palestinian people.

The unfortunate events that sparked the conflict started from protests by Palestinians in Jerusalem in response to an anticipated decision by the Israeli government on the expulsion of Palestinian families from the Sheikh Jarrah neighborhood of East Jerusalem, which is recognized as an official Palestinian territory under the international law but is unofficially claimed by Israel as an annexed territory. Despite the ongoing

COVID-19 outbreak in the area, the demonstrations continued to develop into violent clashes. The Al-Aqsa Mosque, or the Temple Mount, a large holy site in both Islam and Judaism, was also raided by the Israeli police with explosive grenades, rubber bullets, and tear gas (Awadallah & Elessi, 2021).

The riots, which wounded around 250 Palestinians, took place on Qadr Night, a Muslim holiday, and Jerusalem Day, an Israeli national holiday. The expulsion decision was then postponed for 30 days to defuse tensions. However, on May 10, 2021, Hamas and the Palestinian Islamic Jihad, two Palestinian militant groups, retaliated by launching missiles into Israel from the Gaza Strip. Israel replied by attacking military targets with fighter jets and attack helicopters, which unavoidably targeted highly populated civilian targets (Awadallah & Elessi, 2021). The airstrikes continued even during the Eid'l Fitr on May 13, 2021, which gathered tens of thousands of Palestinian worshippers in Al-Aqsa Mosque, marking the end of Ramadan, Islam's holiest month (Alsaafin et al., 2021). As such, what was meant to be a beautiful celebration had turned into a night of terror and violence as Israel continued its air raids targeting Gaza.

The conflict can actually be traced back hundreds of years and may be regarded as an existential struggle between identity groups—both claiming the same land as their historic home and national government (Kelman, 2007; Mock et al., 2012). Historically speaking, Great Britain, the former global superpower that took control of Palestine after defeating the Ottoman Empire during World War I, has allowed Jewish migration, with many fleeing from violence in Europe and seeking asylum after the holocaust of World War II. It became evident that the British mandate could not be maintained, and Britain transferred responsibility for Palestine to the United Nations (UN). The UN suggested establishing two distinct and autonomous governments, one Jewish and one Arab, with Jerusalem and its surrounds under international trusteeship, including Bethlehem (Adelman, 2008).

According to the partition plan, the Jewish state would have a small majority of Jews, whereas Jerusalem, the international city, would be virtually evenly divided between Arabs and Jews. Jewish leaders approved this proposal, but the Arab Higher Committee rejected it with the support of Arab League member nations. This resulted in the Arab League's forces intervening in aid of the Palestinian Arabs against Jewish paramilitary. Nonetheless, the Israeli army prevailed, and by the conclusion of the war in 1949, Israel held significantly more land than that allocated by the partition plan allocated, which is almost 78% of designated Palestine (Mock et al., 2012; Freedman, 2021). The disputed land has subsequently become a battleground in the Israeli-Palestinian conflict—from antiquity to modernity.

Discussion

With the long-standing tensions between the two states and half a century of dispossession and occupation by Israel, Gaza's already precarious health system is being weakened further by the continuing crisis. The geographic dispersion of the seized territories resulted in a patchwork of Palestinian healthcare dispersed over Israeli-controlled territory even up to this day. This disruption, combined with the environmental and health consequences of Israel's invasion and the growing risk of violence, hinders the healthcare system from working effectively as a unified

whole amidst the area's current COVID-19 crisis. Consequently, the occupation's conditions jeopardize the healthcare system due to scarce resources, malfunctioning equipment, and critically low supplies of several vital medications, thus having a significant impact on service delivery and health status.

Before the pandemic happened, Israel's occupation of Palestine had already resulted in a scarcity of healthcare providers and resources. In times of sickness, Palestinians must get travel authorization to visit Israeli health institutes; unfortunately, these authorizations are regularly denied even for urgent medical care (AlKhaldi et al., 2020). Permit limitations definitely hindered Palestinian access to health treatment, putting a strain on the healthcare system. Access and movement restrictions were frequent heavy problems in Palestine, making access to health treatment extremely challenging (Anera, 2020). As a result, hundreds of thousands of Palestinians lack access to primary healthcare. Although there are few healthcare facilities in the occupied regions, those that do exist suffer equipment and medication shortfalls. In fact, Palestine has only 375 intensive care unit beds and 295 ventilators (AlKhaldi et al., 2020). Aside from the shortage of medical equipment in Palestine, healthcare facilities are also frequently hampered by power outages and water shortages. The lack of reliable electricity makes it even more difficult to provide care for patients. At the same time, the lack of flowing water also makes it difficult to keep medical facilities clean (Anera, 2020).

Furthermore, the state also has a shortage of healthcare workforce with a very low doctor-patient ratio of 1 to 2 physicians per 1,000 population (AlKhaldi et al., 2020). The weak healthcare system brought by the shortage of healthcare resources and inadequate healthcare workforce has always been one of the state's main problems. The healthcare workforce is extremely limited. Medical specialties with a low supply of doctors include family medicine, pediatrics, neurology, oncology, surgery, and psychiatry. Doctors who want to specialize in these specialties must leave Palestine for training, and they do not usually return once their training is completed, which contributes to the shortage of specialized physicians in both the West Bank and Gaza (Anera, 2020).

In addition, Israel's refusal to issue construction licenses and limitations on medical imports has hampered efforts to expand Gaza's number of health institutions, which resulted in inadequate healthcare facilities in the territories (AlKhaldi et al., 2020; Atrache, 2020). Israel has also placed limits on medical supplies and prescription and over-the-counter drugs, resulting in a reduction in Gaza's treatment capability. Likewise, due to limitations on imports, simple household items that can prevent COVID-19 transmissions, such as hand sanitizer, antibacterial wipes, and even soap, are also scarce (Anera, 2020; Atrache, 2020; United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2020). With Gaza's protection and healthcare infrastructures already unstable, health services are on the verge of failing—a condition exacerbated by the COVID-19 outbreak. If a lack of healthcare personnel, facilities, and equipment has already hampered the COVID-19 response, imagine how much worse it could be during and after a destructive conflict.

Since the conflict started, Palestinians have faced enormous obstacles in obtaining the healthcare they need to live with many of Palestine's health institutions ceasing operations. Hospitals have been inundated by waves of dead and injured since the 11-day bombings have killed 256 Palestinians in Gaza (including 66 children and 40 women) and injured more than 1,900 individuals. Over 77,000 Palestinians have also been displaced from their homes (OCHA, 2021; Newburger, 2021). This outrageous and devastating humanitarian crisis has gravely affected the failing healthcare system in the state. As more injured patients were brought in as a result of the conflict and bombings, the hospitals in Gaza had to accommodate them despite the high cases of hospital admissions of COVID-19, thus, further escalating the problem of the state's healthcare system.

For instance, medical professionals were overwhelmed by the number of casualties. Many of those rescued from the rubble of destroyed buildings were unable to reach the hospital as the main road leading to Al-Shifa, the Gaza Strip's largest medical facility, had also been severely hit along with other healthcare facilities which were said to be purposely targeted by the Israeli military (Adli, 2021). As the hospitals filled up due to limited capacity, staff started setting up beds in reception areas, citing medical and equipment shortages resulting from Israel's 15-year siege of Gaza and the COVID-19 outbreak (Saab, 2021). Gaza's healthcare system, which is still fighting COVID-19, struggles to care for the wounded whom Israeli bombings have injured.

Several Palestinians also left their homes to look for a safer place rather than staying in their homes to prevent acquiring COVID-19. Many of them temporarily sought refuge in schools and mosques, which were turned into evacuation centers because their homes were already damaged by the bombings (Alsaafin, 2021; Newburger, 2021). Due to displacement and overcrowding, basic public health protocols, such as observing social distancing, refraining from mass gatherings, practicing proper hand hygiene, and even wearing face masks, were not implemented by the authorities and subsequently not followed by the public because their current priority centered on avoiding the conflict (Alsaafin, 2021). Their choice for survival from the bombings outweighs their fear of COVID-19 transmissions and thus the eventual disregard for public health protocols to curb the spread of COVID-19. This was seriously alarming because there was a higher risk of disease transmission among them, given their forced displacement and living conditions.

Additionally, the arrival of novel variants of concern and the slow vaccination rollout in Palestine had the potential to both aggravate the state's COVID-19 situation as the state had not yet reached the minimum 70% goal of inoculated population in order to attain herd immunity, unlike Israel (GISAID, 2021; Mathieu et al., 2021). As of June 13, 2021, only 8.01% of the Palestinian population had received at least one dose of the COVID-19 vaccine, and just 4.89% were fully vaccinated (Mathieu et al., 2021). As a result, COVID-19 cases could exponentially rise, which is most likely to happen due to Gaza's previous record of a high COVID-19 positivity test rate of 28%, which was considered as one of the world's highest (Baker, 2021). With records being high before the conflict, there is an even higher probability that this will double or triple now since Gaza is in total chaos.

However, the actual number of cases might be underestimated and underreported due to the current humanitarian crisis caused by the conflict. As of June 13, 2021, Palestine has reported 340,376 total confirmed cases of COVID-19, with 3,801 deaths. Among them, 4,189 are active cases and 123 are new cases during that day (Palestinian Ministry of Health, 2021). After the start of the Israeli bombings in Gaza, reported cases suddenly dropped to less than 500 cases per day. These bizarre epidemiological reports, which are not uncommon in chaotic states (Rocha et al.,

2021), are thought to result from the state's struggle to test and report COVID-19 cases due to the missed cases, the bombing of the only COVID-19 testing laboratory in Gaza, and the tragic death of the head of the COVID-19 response (Baker, 2021; Shaikhouni, 2021). Hence, all testing and response in Gaza had come to a halt, thereby aggravating the already crumbling healthcare system.

With the constant bombing and destruction of homes and various infrastructures, especially hospitals and healthcare facilities, Palestinians are faced with an even greater challenge as to their response to the ongoing COVID-19 pandemic, especially that the testing has been halted due to the continuing turmoil. Hence, a great need for the international community to intervene in the conflict and provoke an immediate response to this humanitarian and health crisis. With the ceasefire agreement following 11 days of unrelenting bombardment, the international community must take action to protect Palestinians and the vital infrastructure needed for their survival by pressuring Israel to ease its medical permission limitations to provide them access to life-sustaining and life-saving care that is not accessible in Gaza. Moreover, responsible authorities should enhance coordination and collaboration to address the Gaza Strip's effects of the Israeli attack, particularly by prioritizing the rehabilitation process and repairing crucial infrastructure, like power, water, and sanitation facilities, while ensuring that humanitarian and medical personnel can move freely and safely to deliver life-saving interventions.

Support and donations must then be directed towards stabilizing the health sector in the state to aid in the mobilization of healthcare services and to further attain herd immunity through vaccines, medicines, and facilities. Public health protocols should be implemented to contain the virus and prevent its further transmission, especially in the schools and mosques that were turned into evacuation centers for displaced Palestinians. Temporary healthcare facilities can also be put up for COVID-19 patients and all the wounded people who need immediate medical attention. Meanwhile, evacuation of the people from Gaza to a safer place can be done to protect their physical well-being and attend to matters of mental health and emotional stability, especially that they have experienced immense trauma. Psychological interventions must also be provided to ease the burden of the double disaster on the mental health

of Palestinians. Lastly, a long-term action would be providing financial help to Palestine to aid in its rebuilding efforts and rehabilitation.

What the COVID-19 pandemic and the Israeli bombings in Gaza undeniably have in common is that they are both situations of crisis. As such, cooperative and collaborative efforts among communities, local and international governments, and non-government organizations are necessary to efficiently mobilize resources and mitigate the COVID-19 pandemic. This can be done by considering a pandemic strategy for healthcare system reinforcement in light of health governance and policies, information systems, new technologies, equitable allocation of resources and investment plans, health research systems, and preparedness capabilities.

There is also a need to coordinate global emergency response and disaster management systems and employ strategies toward the revival of the Israeli-Palestinian peace process. Moreover, it is necessary to ensure respect for and proper implementation of the international humanitarian law that protects the civilian population and their properties and possibly sanction armed groups who were involved in the conflict and exploited the pandemic. These are essential measures in order to resolve the ongoing strife, improve the living conditions of vulnerable populations, provide better access to healthcare, and develop efficient public health infrastructures in Palestine even in the presence of challenges brought about by the current pandemic and decades of armed conflict that continue to pose threats on human security and health governance.

Conclusion

There is no simple answer to Palestine's devastation, but like with medicine, a precise diagnosis is critical for effective therapy. Cooperation and collaborative efforts, funding allocated to humanitarian operations, and respect for and proper implementation of the international humanitarian law are vital in reversing Palestine's downward spiral of instability and vulnerability. The current pandemic, along with the conflict, high levels of violence, environmental hazards, and a continued threat to people's safety, resulted in an exacerbated sense of despair, high levels of psychological stress, and heightened social problems in the Gaza Strip. As such, the task of grappling with

the COVID-19 pandemic is particularly burdensome for strife-torn countries because it poses a double disaster for vulnerable population groups who are already suffering from poor access to healthcare and economic instability. The humanitarian crisis necessitates a more coherent plan, one that addresses not just the immediate impact of conflict but also the indirect influence of institutional problems. If this is not done, whatever solution is used will be a symptomatic treatment rather than a meaningful medication.

Declaration of Ownership

This report is our original work.

Conflict of Interest

None.

Ethical Clearance

This study was approved by our institution.

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