Population health management in Gaza after the devastation

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Introduction

There has been a deliberate push towards better management of population health for resolving many crises of concern. Population health is "the health outcomes of a group of individuals, including the distribution of such outcomes within the group" (1). To deliver patient-centred, easily accessible and effective medical care, health systems must use population health strategies. Clinical data, socioeconomic determinants of health and demographic data all contribute to greater understanding of population needs. Through different organizational, cultural and individual interventions, population health management uses a proactive approach to manage health outcomes for entire populations at risk. The specifics of implementation are influenced by factors such as the development level of social and health services, data accessibility, health information systems, and the qualification of healthcare personnel. WHO recommends 5 key strategies for implementing population health management: reorganizing care models, empowering and engaging individuals and communities, bolstering governance and accountability, integrating services across all sectors, and fostering a supportive environment (2).

The intense conflict in Gaza has caused significant levels of mortality, morbidity, displacement, severe health system degradation, interruption of public health, and other critical infrastructure. The Gaza Strip is currently facing an unparalleled humanitarian crisis; the lack of food, shelter, safety, clean water, sanitation, access to healthcare, and the harsh weather will all contribute to a continued decline in health and wellbeing for the population. And the health system remains unprepared to manage the current crisis.

Over 60 partners are currently operating in Gaza, providing various health care services and supplies to an average 325 600 vulnerable people each week, through more than 240 health service points and in collaboration with other sectors, including shelter, nutrition, protection, as well as water, sanitation, and hygiene (3).

Ensuring sustainable and resilient health system through population health management

The population health management approach has been shown to be an effective long-term approach to integrated healthcare management for patients with chronic illnesses (4). Essential components for the success of population health management include e-health, data integration and patient engagement. However, population health management initiatives are often discontinued due to a lack of resources and lack of support from the community, policymakers or health managers (5). Health services should be integrated across several sectors, including public health, facility, community, and social services, to improve their sustainability.

Policies to advance and safeguard population health, address health disparities, uphold human rights, and increase resilience should be given top priority. Resilience is related to procedures and abilities that produce positive health results for the individual and community in spite of unfavourable circumstances.

Building resilience requires a focus on the capacity of the health system to prepare for, manage and learn from shocks. Health system areas for resilience strengthening include health financing, primary health care, domestic investment, and health equity for vulnerable and marginalized populations (6). WHO emphasizes the importance of system-level resilience, particularly in relation to population health, Agenda 2030 and the 17 Sustainable Development Goals (7).

Needs assessment for successful population health management

Population health management must be based on an understanding of community health needs through triangulation of data regarding service availability, accessibility, utilization, and experience from the perspectives of community members and service providers. This will

help the different actors in identifying available policy, system and environmental strategies in their communities and where there is a need for improvement. It will help them gain nuanced awareness of the communities they serve and provide information for resource mobilization.

Enhancing citizen involvement

Citizen involvement is crucial for ensuring social renewal through the introduction of concepts, subjects and methods, as well as to support policy implementation. We must involve the citizens through knowledge sharing, constructive communication between residents and decision-makers and for identifying obstacles to population health management. To empower patients, families and communities in the planning, implementation and assessment of population health management, we must address health literacy issues to enhance communication, self-care and use of technology *(8)*. This will involve the use of a multidisciplinary strategy to raise awareness and conduct educational activities that highlight the advantages of managing diseases through collaboration and for beneficial health outcomes.

Risk stratification

An intentional, premeditated and proactive process known as risk stratification assigns a risk status or score to each individual based on the likelihood that there may be unfavourable occurrences *(9)*. Risk stratification involves determining a patient's risk status and using that knowledge to guide treatment and enhance general health outcomes. Patients are usually categorized into high-, medium- (rising-), and low-risk groups based on the results of an individual risk assessment *(10)*. The objective is to implement structured integrated care programmes that target the needs of the risk groups in question.

A population health management approach has the potential to gradually alter cultural norms and foster collaboration among teams within and outside the health system. Such collaboration can be strengthened when experts from different teams build mutual trust and familiarity.

Large-scale transformation

Population health management is used to describe the extensive change needed to reorganize and integrate various services at all integration levels. The goal is to improve health outcomes by addressing public health, social care and other public service issues. The approach has yielded valuable insights: (1) a high risk of "waterbed effects", whereby improvements made to one part of the system may have adverse effect on another; (2) "wrong pocket" problems, whereby efficiency gains are reaped by unplanned parties (these 2 insights are linked to interventions that do not fully address the complexity of a system); (3) a dearth of organizational authority and investment for system change; and (4) vested interest "within groups", which stifles innovation across an entire system *(11)*.

Challenges and opportunities

The current crisis in Gaza does not only affect health, it impacts all aspects of life and all demographics (12). Pregnancy- and birth-related difficulties have been reported as a direct result of the psychological toll of the conflict on reproductive health *(13)*. Due to the violence, children who already had mental health issues are now more likely to experience long-term post-traumatic stress disorder and other mental health challenges *(14)*. Traumatic injuries, including amputations, have significantly increased as a result of the countless casualties, in addition to the environmental impact.

Although mass destruction of the health system is the most prominent issue, extreme devastation due to the crisis necessitates fundamental transformation beyond merely restoring the old model. It presents a fantastic opportunity to use new models and approaches for a re-design of the entire health system. The Palestinian healthcare system needs a dramatic change. As the healthcare industry is working hard to share patient data, information from social care organizations is necessary to fully understand a patient's physical and mental health conditions. This extraordinary disaster demonstrates how urgently we need to implement a new and integrated strategy to address the short- and long-term needs of the population.

Conclusion

As the crisis continues to escalate in Gaza, with widespread destruction of the health system, it has become necessary, as always, to broaden the use of population health management strategies in restoring healthcare in the territory. This requires cooperation and collaboration between partners from various sectors, including the community-based organizations, and endorsement by the health authorities.

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