



The Impact of Public Health on Health Systems

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ABSTRACT

Public health is a critical determinant of health system effectiveness, shaping health outcomes and system performance through policies, initiatives, and preventive strategies. This review examines the interconnectedness of public health and health systems, with a focus on two case studies: Ontario's health units and Uganda's disease management. It examines the historical evolution of public health, its key components, and the challenges and opportunities in integrating public health into health systems. The findings emphasize that public health initiatives can significantly enhance health system efficiency and effectiveness by addressing broader social determinants of health and fostering community engagement. The review concludes that an integrated approach to public health and health systems can lead to improved health outcomes and long-term sustainability of health systems.

Keywords: Public health, Health systems, Disease prevention, Health promotion, Health Policy.

INTRODUCTION

Public health plays an important role in the effectiveness of health systems. Understanding how public health impacts health outcomes is crucial, and this review will focus on the impact of public health on health system performance. This review characterizes the challenge of public health policy, tracing its themes throughout a healthy policy proposal and studying case studies in the context of the midterm report. It evaluates Ontario's health units and disease management in Uganda as cases and characterizes two common themes: the interconnectedness of public health and health systems for the overall health of a community, and the role of public interest and community in decisions and decision-making. The argument proceeds in four steps [1, 2]. Current health policy in Canada and Ontario is preoccupied with the health system. However, work demonstrates the futility of trying to build a healthier society while ignoring or precluding healthy public policy and public health. This focus has obscured other issues in terms of framing. Moreover, recent work critiques the "heroic" version of public health and delineates how public health is an excellent example of "complexity." This sets the stage for considering the relationship between public health and the health system. In our report to the Ontario midwifery review, we argued that driven by this complexity, health system design, and delivery should not remain the sole purview of those trained as health professionals. This review seeks to extend this conceptual analysis. It divides public health policies into two categories: (1) demand and need for public health initiatives beyond those of the health system, and (2) initiatives that involve the intricate relationship between the two [3, 4].

Historical Overview of Public Health and Health Systems

Public health has been viewed as an applied discipline and as an approach to achieving greater societal health. Key events have shaped public health and thus health system policy and delivery. For instance, the industrial revolution presented considerable challenges to public health, with cities growing rapidly due to rural-to-urban migration and the increased lifetime resulting in a rise in the population in any particular area. Continuous overcrowding and a lack of good living standards were initially met with responses in the form of drains and other increasing ideas of what would make people and the area in which they lived healthier. This led to the establishment of the Sanitary Movement to consider what was best for society and often resulted in some changes in policy with improved water pumps and better living

conditions in the problematic areas [5, 6]. A rise in healthcare costs and the failure of the current systems or healthcare facilities to cope has led to a change in focus internationally to look at more community-oriented and preventive forms of care. Again, historical events contribute to understanding this. The development of a medical model of care that focused heavily on interventionist care eventually gave rise to the importance of the epidemiological approach in terms of understanding the rise of and need for care; for example, the public health models showed us that while there was a decrease in infectious diseases from around the 1950s, they were being replaced with chronic illnesses such as cardiovascular disease, diabetes, mental health issues, and cancer, to the extent that by the turn of the 21st century, non-communicable diseases were contributing to three-quarters of global deaths. This can make us question the emphasis on earlier programs. We can learn a lot by studying historical movements and the health care system in general. Public health duties were initially local, based within the local authorities, but increasingly health is being seen as a global, international, or EU issue. This has made demands for the evolution and adaptation of the systems we use to provide effective and satisfactory care [7, 8].

Key Components of Public Health

Efficacious public health incorporates a combination of the following components: Disease prevention, protection against external health threats, and in the process, to decrease health challenges in wide groups. The promotion of health involves making general conditions favorable for health, so it is more about applying effective strategies for health improvement across the population than about auxiliary hospital care for the sick. Health education may be defined as the provision of opportunities for people to improve and protect health in everyday situations and local conditions. In sum, the components of public health are concerned with sustaining a "healthy system" where individuals have opportunities to improve and protect their health, especially when doing everyday activities local to them. Public health intervenes in at least four essential corners of public health: disease prevention, health promotion, health protection at the international level, and the function of the National Health Service in the health approach to meet public expectations. Disease prevention is a cornerstone of public health systems in any society, with the essential role of epidemiology tracking changing health problems and the effectiveness of existing interventions. Public health focuses on health improvement programs devolved to or located in the community and the hospital sector. A cornerstone of all the components of public health is effective partnerships and community involvement. Components are elements of institutions or systems. Bringing together the mix of activities associated with the components can create a system that is more than the sum of its parts. This system approach is designed to both prevent and control health problems. The "do something" approach is always out of date based on its results. The sum of a system of components is disease prevention, health promotion, and health education. A dynamic system requires components to evolve for several reasons: components respond to changing public attitudes and are increasingly likely to be culturally based to expand existing components, e.g., mental health and in some cases, health care reform. Establishing a comprehensive public health system is daunting because components are inherent to any health system, and as such are part of established sectors, bureaucracies, and employment areas. Development would therefore be seen as extending others' roles [9, 10].

The Relationship Between Public Health and Health Systems

Public health and health systems are intricately related. Public health strategies and interventions have been widely implemented in many different countries to improve the functionality and accessibility of health systems. Public health work strengthens the health services' ability to respond to acute health needs through interventions across the health system, including areas in primary health care. Public health initiatives can be part of a broader social determinants of health agenda, working with health preconditions to break a synergy of comorbidities and systemic health inequalities [3, 11]. Investigating the relationship between public health and health systems often includes an attempt to establish the respective efficiency of public health initiatives and the health system in promoting and protecting the health of populations. A study of cancer registry data for seven cancer types, together with data from several public health interventions, shows how to combine the use of public health evidence and estimated long-term effectiveness to align the goals of public health policy and government authorities in charge of the health service system. The assessment of the efficiency of the health service is often hampered by the fact that there is no information available on the stage of diagnosis and on risk factor-reducing treatment and more generally, data on health care efficiency do not measure the efficiency of the health system i.e., all preventions and treatments against various diseases since equal health gains may require very unequal health care expenses. An intervention of targeted catch-up immunization for immigrant children in Copenhagen's Nørrebro area was hailed as a success when approximately 75 percent of the children had received at least one vaccine dose. The strategy also involved the collection of communication data for the

evaluation of public relations activities. Public health system initiatives have, for example, addressed waiting times for medical oncology care at a time when they ranged from five to six weeks; following the implementation of an integrated electronic referral system for GPs, the average waiting time for medical oncology care is now three weeks, though it would appear that this has nonetheless had little to do with improvements in efficiency in the system. These are challenges for clinicians when public health system issues, not routinely great concerns within discussions, shoulder their collective ways to center stage in contexts faced by cancer care clusters [12, 13].

Challenges and Opportunities in Integrating Public Health into Health Systems

The integration of public health into health systems presents multiple challenges that may impede the transfer of knowledge, models, system designs, processes, and best practices across public health and health system boundaries. In practice, constraints involving limited funding, organizational resistance, and lack of political will may reduce the potential effectiveness of efforts to date. In many countries, the health and welfare systems are characterized by a degree of fortification between disciplines, professions, departments, and levels. This may lead, then, to fragmentation like services provided. Moreover, the actual services provided by these silos are often vertically oriented and disciplinarily programmed as opposed to being patient-centered or designed to address people's health needs and their determinants. Challenges also exist in the creation of a workforce that can operate effectively across these boundaries. With time, technology and some innovations can help minimize the challenges and thus improve synergy and effectiveness across public health and health systems [14, 15]. On the other hand, there are strong drivers of the integration of public health into health systems. These include potential cost efficiencies, economies of scale, aggregated resources, and shared responsibilities. Development and delivery of health information systems and epidemiological methods, strong analytical capability, and workforce within the public health sphere can be used or re-engineered and adopted by health systems. An integrated effort to identify health needs and disparities can guide service delivery, training, and development of the workforce and consultation interactions with stakeholders. Collaboration among various public health, health policy, and professional interest groups including academics, practitioners, health services, and health systems can achieve synergies. Building alliances with the community has the potential to link health issues for primary care with social determinants. However, it is unlikely to occur unless policy and political reforms are instituted, ensuring an honest and trusted environment for the relationships to flourish. There is a clear need for a proactive approach to integrating public health into health systems, highlighting both the challenges and the opportunities [16, 17].

CONCLUSION

Public health is essential for improving the efficacy and sustainability of healthcare delivery systems. The case studies of Ontario and Uganda demonstrate the need for community-focused health policy and addressing the socioeconomic determinants of health to promote healthier societies. A significant point is that public health and health systems must be considered as interrelated entities, with good public health programs reducing disease burdens while simultaneously relieving pressure on health systems. By incorporating public health into health system design and delivery, policymakers may ensure more efficient, equitable, and comprehensive treatment, leading to better population health outcomes and a more resilient health system.

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