Role of Primary Care Physician in COVID-19 Response, A Review

Abstract:

All healthcare providers have had to adapt and be flexible in order to respond to COVID-19. Nonetheless, the emphasis, particularly at the start of the outbreak, was on the impact and response of secondary and tertiary care. The primary care sector's responsibilities in the response focused on how it could help secondary and tertiary care centers respond. A small percentage of current research and evidence focuses on health services implications or applied public health approaches, with even fewer on the role of primary care and family medicine providers. So, while our scientific understanding of the virus and its subsequent clinical consequences has grown exponentially, information about primary care responses to COVID-19 in a variety of settings, as well as the interaction with patient perspectives and priorities, and broader public health responsibilities, remains significantly hazier.

Introduction:

The COVID-19 pandemic is spreading around the world, wreaking havoc on public health, the economy, and society. Furthermore, the pandemic is spreading, with flare-ups in several countries. At the time of writing on April 2021, the WHO had confirmed more than 143 million COVID-19 cases caused by SARS-CoV-2, with more than 3 million deaths reported globally [1]. The pandemic has resulted in the loss of livelihoods as a result of prolonged shutdowns, which has had a knock-on effect on the global economy. Despite significant progress in clinical research leading to a better understanding of SARS-CoV-2 and the management of COVID-19, limiting the continued spread of this virus and its variants has become an issue of increasing concern, as SARS-CoV-2 continues to wreak havoc across the world, with many countries experiencing a second or third wave of outbreaks of this viral illness attributed primarily to the emergence of mutant variants of the virus [2].

As the first point of contact for the COVID-19 outbreak, the primary healthcare system's response is critical, and it is assigned a key role on the frontlines in every country facing undifferentiated cases. Worldwide, various functions designated for general practice, such as screening, education, and home quarantine monitoring, are critical. Primary care physicians could triage patients to specialized hospitals for proper care using integrated and coordinated healthcare delivery systems, reducing hospital overcrowding [3].

While other medical specialties may incorporate some of these characteristics at times, none exemplify all of them as well as family medicine. Significantly, extensive research has shown that having access to a family physician improves patient satisfaction, hospitalization rates, clinical outcomes, and equity. These characteristics are precisely what put family doctors in a unique position in pandemic response [4].

Primary healthcare is crucial in every country during the pandemic for an integrated and coordinated healthcare delivery system; hence, it is of paramount importance to maintain a sufficient frontline workforce. Primary care physicians routinely treat respiratory illnesses and may be the first point of contact for many people infected with COVID-19, especially since they diagnose and support the vast majority of COVID-19 infections that are managed at home. Primary care also plays an important role in public health, particularly in the prevention of influenza and, more recently, the vaccination against COVID-19 [5, 6].

There are aspects of family practice that necessitate specific pandemic preparedness plans for primary care. In the event of a community-wide outbreak, family doctors may be the first point of contact. This necessitates that family physicians deal with new diseases when there is limited information available about them, such as their modes of transmission, effective prevention practices, and therapeutic options. Family doctors must also reduce the risk of transmission to other members of the community, clinic staff and trainees, as well as themselves and their families [7]. During the early months of the COVID-19 pandemic, some family physicians were hesitant to screen community members in their clinics due to a lack of appropriate personal protective equipment (PPE), inadequately equipped examination rooms, and concerns about proper cleaning during clinic hours. To address some of these concerns, designated COVID-19 assessment centers, community-based PPE distribution, and government control of supply chains were implemented [8].

As the disease is better understood, public health issues will include discussions about promising vaccines (and boosters), rapid testing and preventing further spread, contact tracing, emerging therapeutics, and coordination with multiple medical specialists or inpatient facilities. As primary care plays an increasingly important role in the treatment and monitoring of ongoing pandemic ramifications, multifaceted research insights will be required to provide prompt yet accurate evaluations of infection vectors, disease patterns, acute and chronic symptom recognition, developing pharmaceutical and other treatment modalities, and the impact of appropriate referrals as needed [9].

Furthermore, data on accompanying psychological responses to infections and imposed periods of isolation, social and employment disruptions, risk factors for special patient groups and subsequent equity concerns, accumulating treatment costs with limited clinic resources, and proximal and longitudinal outcomes will be required. Furthermore, the sensitive recognition of individual patient needs as well as larger population level burdens must be reassessed on a regular basis. This pandemic's personal, national, and global impact cannot be overstated, and it

will most likely be felt for years to come. There is an ongoing need to benchmark primary care responses, particularly in terms of patient outcomes [10].

Challenges in Primary Care During COVID-19 Outbreak:

- Burnout of Primary Care Physicians: The overwhelming burden of COVID-19 illness could lead to caregiver burnout. The major causes of stress among healthcare workers include too frequent changes in policies, working beyond the job description, new daily tasks, long working hours, sleep disturbances, debilitating fatigue, and the risk of getting the infection and putting their family at risk of a life-threatening condition [11]. According to China's National Health Commission, as of 24 February 2020, more than 3300 healthcare workers had been infected and as of 3 April, a total of 23 of them have died.14 Unfortunately, on 2 September 2020, the WHO Pan American Regional Office announced that 570 000 healthcare workers were infected and 2500 died due to COVID-19. Physicians' burnout and shortage of healthcare workforce compromise patient care and threaten the stability of health systems [12].

- Strain: As the 'first in, last out' health system, primary care is under tremendous strain to cope with and deal with the rising number of COVID-19 cases, in addition to its usual role of providing primary care for patients with chronic illnesses, acute conditions, or even preventive care. In addition to its anticipated role in managing the fallout from the disasters [11].

- Governance of primary care: Compared to public health agencies, hospitals, paramedic services, and other healthcare organizations, primary care in Ontario does not often have a central hierarchical structure. This creates challenges in coordinating a unified primary care pandemic response, though it certainly does not preclude it [7].

- Recognition and support: As previously stated, pandemic responses have frequently been focused on secondary and tertiary care, with little understanding of the critical role of primary care. "Authorities may designate primarily hospitals as surge sites, ignoring primary care community health center networks," write Rust et al. Because of a lack of understanding of the role of family physicians in the community during a pandemic, primary care is under-equipped in terms of personal protective equipment and workforce investment [13].

- Risk of Infection: High susceptibility to infection among healthcare workers was reported in previous literature because more than 3000 healthcare workers were infected in China and 20% of responding healthcare workers were infected early in the COVID-19 pandemic in Italy. Furthermore, a systematic review by Kisely et al found that healthcare workers who had direct contact with patients had higher levels of acute and posttraumatic

stress, as well as psychological distress. Furthermore, problems in the labour force may be exacerbated by refusal to work due to psychological factors and concerns about their families [14].

- It is unclear how family physicians informed their care provision and role fulfilment during the current pandemic in the absence of clearly defined pandemic plans for primary care. With multiple sources of information providing updates and guidance as the pandemic unfolds, family physicians may have differed and potentially conflicting perspectives on their responsibilities. Furthermore, because policymakers have had little recent experience with primary care provision during a pandemic, they have little evidence of family physicians' professional and personal experiences with implementing the policies envisioned for them and their communities of care [7].
- Given the non-specific manifestations of this infection, primary care physicians are under even more pressure to decide which suspected/confirmed COVID-19 patients to send home, refer to a specialist, or admit to the hospital. Rawaf and colleagues summarized the early experiences of global primary healthcare systems during the pandemic. They discovered that, despite a decline in primary healthcare utilization in the early critical stage, primary care remained the primary point of contact for patients with COVID-19 and non-COVID-19 related conditions. Primary care expanded its role in supporting other sectors in many countries by broadening its scope of practice and lending staff to hospitals and other departments [3].
- Access to care in a timely manner has long been a problem in primary care. Evidence suggests that prior to the pandemic, wait times for primary care visits were increasing, with a decreasing share of patients able to access a new patient appointment within a week, though new appointment wait times for privately insured patients did not significantly change after the Affordable Care Act brought an influx of newly insured patients [15].
- The 'COVID-19 primary care hubs' implementation has been patchy, with services taking their time to develop and a perception of a lack of clear central guidance. Emerging evidence suggests that utilization is relatively low in some areas where hubs are operational, indicating that the model may not be functioning at the capacity that was planned for. As a result, some hubs and home visiting services have closed, and responsibility for managing patients with suspected COVID-19 infection has been transferred back to general practices. Finally, advising patients to discontinue non-essential care – such as physiotherapy, radiology services, cervical screening, and spirometry – has the potential to delay diagnoses, worsen health outcomes, and exacerbate existing health disparities [16].

Recommendations for Better Outcomes:

Promoting good collaboration, communication, and integration. Previous research has highlighted the importance of improving collaboration and day-to-day communication between PH and PC, PC and hospitals, different levels of government, and the public and private sectors (including PC) [17]. PCPs' experiences revealed a focus on hospital care at the expense of PC services, which received insufficient information and support, as well as failures to formally engage stakeholders at the forefront of providing community-level care, such as PCPs, pharmacists, birth attendants, and traditional healers. This included the requirement for direct lines of communication between health care workers and PH [18].

The integration of PCPs in pandemic response planning has been advocated in order to recognize the critical role of PC in community delivery of services, contextualize responses to local circumstances, and ensure adequate support and protection. Local inclusion of preparedness planning across sectors (government, local health systems, PH units, PCPs) was advocated, with a focus on community need and supported by political, financial, and educational resources [19]. A shared misunderstanding of the functions and responsibilities of the other discipline, as well as a mismatch between the two disciplines' roles in terms of authority and responsibility, were barriers to collaboration between PC and PH [20].

Improving the primary health care system as increase PCP numbers, attracting medical students and residents to primary care, and deploying personnel between institutions as surge support during epidemics were among the recommendations. Investment in strong primary and community care systems with embedded networks of health workers was recommended to provide a trusted source of community engagement that could be relied on during emergencies and to provide care to those who may be reluctant to seek treatment otherwise. This would necessitate solutions for financing, scaling up, and institutionalizing community health services [21, 22].

As sentinel systems, PHC services must be supported. Expert reviews of SARS responses in Canada and Hong Kong identified a need to support primary care's key sentinel role through the collection of electronic surveillance data and the expansion of existing surveillance systems. Researchers argued that improved collaboration between PC, PH, and other providers would contribute to the provision and coordination of real-time alert systems for managing infectious diseases, as well as enable large-scale planning and mobilization, enhancing sentinel roles [23].

Providing consistent, coordinated, and trustworthy information from a trustworthy source Recommendations included cutting down on duplication, improving communication clarity, and providing consistent, clear guidance. There were no policies that addressed the needs of rural or remote populations, or of First Nations people. At times, coherence was difficult to achieve because infectious disease experts' perspectives on the risks and implications of emerging evidence differed [24].

Defining primary care's role during pandemics. PCPs are distressed by a lack of role clarity. The importance of considering pandemic preparedness plan implementation, including formalized

protocols and explicit mechanisms for disseminating information and supplies to all PCPs, including ambulance paramedics, was emphasized. To enable conformity, studies across epidemics recommended that clinicians become aware of national pandemic plans [25].

Protecting the primary care workforce and the community, as well as ensuring access to antiviral treatments and vaccines for priority groups. It was recommended that staff and patients at higher risk of a poor outcome from infectious disease, including pregnant women, be identified and protected [26].

Encourage health-protective behaviors, as well as psychological well-being and the provision of personal protective equipment. Centrally organized contingency plans for mitigating business risks, as well as financial assistance for PCPs, were recommended. Prior to the crisis, the formation of cohesive teams, as well as clear documentation and communication systems, aided community pharmacists in their adaptation to SARS. One method of reducing stress was the provision of relevant information and training, as well as the associated use of PPE. Other suggestions included prompt and accurate guidelines, immunizations, workload relief, and psychological support [27- 30].

Evaluating the effectiveness of interventions and rigorously assessing disease response, including training and supervision of health workers, accessibility, and medication supplies, was recommended, as was the need for clinical audits to evaluate the structure, process, and outcomes of PC action plans [31].

Conclusion:

Health decision makers must recognise the importance of responding to this crisis from the standpoint of primary health. Despite a rapidly growing body of literature on COVID-19 disease, primary care physicians are dissatisfied with the COVID-19 pandemic's management. Primary care's role will undoubtedly evolve, from detecting acute symptoms and referring patients to chronic care management challenges as patients face long-term disease consequences to the newer manifestation of long COVID.

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