

# Primary care doctors and the control of COVID-19

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In January 2021, Hong Kong marked the grim anniversary of the first reported case of coronavirus disease 2019 (COVID-19) in the territory.<sup>1</sup> At the time of writing, Hong Kong has recorded a total of over 10 000 cases and a death toll of nearly 200, against the backdrop of over 110 000 000 cases and 2 500 000 deaths worldwide.<sup>1,2</sup> Non-pharmaceutical interventions are capable of containing the pandemic<sup>3</sup> with isolation of cases and quarantine of contacts being the fundamental components. However, pre-symptomatic and asymptomatic transmission of COVID-19 can undermine the effectiveness of isolation and quarantine if these measures are not coupled with rapid contact tracing and testing.<sup>4</sup>

In a recent review paper, it was found that neither absence nor presence of signs or symptoms of COVID-19 could accurately rule in or rule out the disease but anosmia or ageusia may be regarded as a red flag, and fever or cough is a sensitive indicator for identifying patients who need testing.<sup>5</sup> In this issue of the *Hong Kong Medical Journal*, Leung et al<sup>6</sup> report the findings of a cross-sectional study conducted using data collected from the first public temporary test centre in Hong Kong at the AsiaWorld-Expo. The authors found that although symptoms such as cough, sore throat, and runny nose were reported in 86.0% of persons who tested positive for COVID-19, these symptoms were non-specific and were also reported in 96.3% of persons who tested negative. The authors recommend that gatekeeping healthcare providers stay vigilant in arranging early testing and remain aware of both clinical and epidemiological manifestations of COVID-19. Another study conducted in Australia compared the efficiency and sensitivity of different testing approaches in detecting community transmission chains. The authors found that testing of all patients with respiratory symptoms in the community, in combination with thorough contact tracing, was most effective.<sup>7</sup>

Primary care doctors are the gatekeepers of our healthcare system, and the COVID-19 pandemic has highlighted the important role of primary care from the perspectives of infectious disease control and surveillance in the community. In many countries, primary care doctors are an integral part of surveillance systems for infectious diseases such as influenza.<sup>8</sup> Similarly, well-trained primary care

doctors are indispensable in the early identification and isolation of COVID-19 cases, by contributing to a successful surveillance system which can also identify changes in transmission patterns and at-risk population subgroups,<sup>9</sup> as well as evaluate the efficacy of public health control measures.<sup>10</sup>

The cost-effectiveness of different COVID-19 testing strategies depends on the transmission scenario in the community, in addition to the cost per test.<sup>11</sup> Reimer et al<sup>12</sup> recommend evidence-based prioritisation of testing, where testing capacity and resources are limited, in order to flatten epidemic curves, lower values of effective reproduction number, and ease the burden on hospitals and intensive care units. Primary care doctors, being the first access point of the healthcare system for most of the general public, are in a prime position to practice evidence-based testing of patients in the community based on clinical assessments.

Primary care doctors are vital to the unprecedented global vaccination campaign. Healthcare workers are at a higher risk of contracting COVID-19, and in a systematic review, Bandyopadhyay et al<sup>13</sup> found that general practitioners were one of the specialties at the highest risk of death from COVID-19. Healthcare workers, including primary care doctors, are recommended as a priority group for COVID-19 vaccination worldwide, including in Hong Kong<sup>14</sup> where the COVID-19 Vaccination Programme was launched in late February.

Primary care doctors are also at the forefront of communicating with the community. Wong et al<sup>15</sup> found that COVID-19 vaccine acceptance in the Hong Kong community is not high (37.2%; 95% confidence interval=34.5%-39.9%) and perceived severity, benefits of the vaccine, cues to action, access barriers, and harms were among the factors associated with acceptance. Studies from the H1N1 pandemic found that primary care doctors were highly influential in H1N1 vaccine uptake<sup>16</sup> and it is reasonable to expect that this will also be the case for COVID-19 vaccines. Primary care doctors will require regular updates and accurate information on the vaccines to communicate clearly with their patients and public health authorities.<sup>17</sup>

A shortage of primary care professionals

is associated with a higher death rate due to COVID-19.<sup>18</sup> Primary health care has a crucial role in infectious disease epidemic management and well-integrated primary care and public health systems are vital for a cohesive response.<sup>19</sup>

### Author contributions

All authors contributed to the editorial, approved the final version for publication, and take responsibility for its accuracy and integrity.

### Conflicts of interest

All authors have disclosed no conflicts of interest.

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