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Letter to the Editor

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Challenges facing Chinese primary care in the context of COVID-19

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Dear Editor:
Describing the development of primary health care and the role of general practitioners (GPs) in different countries is an important subject. Through reading the article "The role of general practitioners in managing the COVID-19 pandemic in a private healthcare system,"[1] we know the role of Swiss GPs in dealing with the COVID-19 epidemic and the characteristics of Swiss primary care system. China, which accounts for more than one-fifth of the world population, is also the first country to be affected by the COVID-19 epidemic. Therefore, it is necessary to deliver China's experience in primary care management in COVID-19 and the needs of GPs to primary care physicians globally. In this letter, by comparing with the published results of a survey from Switzerland, we try to discuss the actual health care delivery status of Chinese GPs and make recommendations about their educational needs with the backdrop of the pandemic. The purpose of this study[1] was to understand how GPs participated in coping with the first wave of the COVID-19 pandemic. All of the canton's GPs were invited to participate in the quantitative survey through online questionnaire, while the qualitative survey included interviews with 10 volunteer GPs. The results of this study[1] showed that one-third of GPs chose not to reorganize their practice for the specific management of suspected COVID-19 patients. GPs in Switzerland were free to participate in managing suspected COVID-19 patients. However, GPs were frustrated that public health authorities did not recognize them as the main health care providers to manage the epidemic.[1] Finally, this study[1] has reached an important conclusion, that is, the integration of primary care professionals in the response to a health crisis cannot be improvised. This integration must allow for a partnership operation with support, recognition, and mutual respect. In a word, when major public health events occur, it is worth pondering how GPs, as the main undertakers of primary care, can play a better role.

Development status of GPs in China

In January 2020, in order to fight against the COVID-19 pandemic, the Chinese government launched the first-level response to major public health incidents, requiring all regions to adopt strict prevention and control policies. Community engagement is the first line of defence in the battle against infectious diseases.[2,3] While the health care systems are put to a tough test, it is also a critical moment that the roles and responsibilities of family doctors are assessed and recognized.[4] According to the survey,[5] more than half (51.0%) of primary health institutions in China have set up fever clinics, and over 80% have carried out pre-examination and triage services. By far most (89%) GPs are counselling patients about COVID-19 vaccines.[3,6] Half (49%) are caring for nonhospitalized patients with COVID-19, and one-fifth are caring for hospitalized patients with the infection.[6] GPs are also participating in COVID-19 research (6%) and developing new COVID-19 services (17%). Besides, half (50%) are highly concerned about the lack of clarity from government regarding GPs' role in the pandemic response.[3,6] Cohidon et al. mentioned that GPs in Switzerland were also encouraged to actively participate in crisis management to avoid overloading the medical system.[1] We need to acknowledge the pivotal role of community-based practitioners who are professional, competent, and responsible.[4] However, there are still some problems that deserve our attention. First, the contradiction between supply and demand of GPs is prominent. At present, there are 308,700 GPs in China, accounting for only 8.6% of practicing physicians.[7] In contrast, the number of GPs in the United States and Canada accounts for nearly 50% of the total doctors.[8,9] The research in South Africa shows that the number of GPs is the main obstacle to the development of a family medical system.[10] Besides, the distribution of primary health resources in China is very uneven, mainly concentrated in the eastern region.[9] In the early stage of COVID-19 epidemic, the emergence of a large number of

suspected patients instantly saturated medical resources, and some medical staff were infected and isolated, resulting in an extreme shortage of medical human resources. Second, the medical level of GPs in primary medical institutions is relatively low. On the one hand, GPs lack awareness of disease crisis intervention and experience in dealing with public health emergencies.[4] On the other hand, the first aid ability of GPs is weak, far less than that of specialists, and it is difficult for them to undertake the diagnosis and treatment tasks. Considering the limited treatment capacity of primary health institutions, in February 2020, the Chinese government asked GPs not to undertake the diagnosis and treatment tasks of COVID-19, but to do a good job of referral.[2,3] By contrast, this study mentioned that in Canada, general practices were reorganized into "hot clinics" where potential COVID-19 patients were sent.[1] In addition, many problems, such as failing to provide psychological assistance to residents in time, warn that the GPs' sense of responsibility and service need to be further improved. In this study,[1] GPs in Switzerland have the right to choose not to intervene in the crisis due to their independent status. However, many GPs organized specific testing pathways inside their practices (77%) or outside their practices for these patients, which is commendable.[1] Professional training of general practice has accumulated years of experience in Europe and North America, while general practice in China has just started. However, the problems that China is currently facing are also problems that most countries may encounter at first. Therefore, we need patience and confidence in China's current investment in primary care.

The professional dilemma faced by GP training

GPs have a "first in, last out" role. They always stand in the forefront. As well they are also the ones who manage the aftermath of contingencies.[4] We need to appreciate and emphasize the key role of GPs and primary care teams in emergency situations. Problems such as insufficient number, low quality, and lack of sense of responsibility of GPs exposed in the management of COVID-19 actually highlight the professional dilemma faced by general practice education in China.[9] First of all, the post competence of GPs is insufficient. As stated in this study,[1] the Swiss health care system is considered to be one of the best in the world, and most GPs have received training in general internal medicine. At present, the team of GPs in China is mainly composed of rural doctors and community doctors.[7] Compared with specialists, they are generally older and have lower education level.[9,11] In the standardized training stage of residents, it is difficult for GPs to cultivate strong practical work ability due to the lack of systematic general practice thinking training system.[12] In the stage of continuing education, GPs lack skills training such as knowledge of respiratory infectious diseases, and it is difficult for them to cooperate with the Center for Disease Control and Prevention in practical work, resulting in the separation of medical treatment and prevention.[2] In contrast, the education and evaluation of GPs in the United States has formed a relatively perfect system, including 3 consecutive stages: premedical school, medical school, and continuing education, with emphasis on lifelong learning and evaluation.[9] Second, the occupational attraction of general practice is insufficient. By learning from the experience of Europe and the United States, China has established a variety of training methods for GPs, such as transfer training for GPs, postgraduate education for GPs and standardized resident training for GPs.[12] By the end of 2018, there were only 2.2 GPs per 10,000 Chinese.[7] In contrast, in 2015, there were about 240,000 family doctors in the United States, with an average of 127 family doctors per 100,000 people.[9,13] Due to heavy work tasks, low social status, and salary, Chinese GPs have low job satisfaction and high turnover rate.[14] The actual registration rate of GPs is less than 50% in China.[7] Third, the post driving force of general practice is not strong. GPs serve people of different genders and ages, involving physical, psychological, and social health problems. Because GPs have a wide range of services and often need to provide services actively, it is difficult to make them take root at the grass-roots level only by external driving forces such as salary.[14] In United Kingdom, a sound GP system has made the doctor–patient relationship a partnership, and there is almost no dispute between doctors and patients.[15] As a result, doctors have become the most trusted profession in this country.[15] Nowadays, there is a common phenomenon that Chinese GPs are easily satisfied with routine diagnosis and treatment, but fail to be strict with themselves according to the professional standards of health gatekeepers.[9] In contrast, Cohidon et al. mentioned that many GPs in Switzerland chose to actively participate in crisis management and expected the authorities to consider them as the main medical service providers.[1]

Suggestions on strengthening the training of GPs

Strengthening primary health care is the most effective way to improve mental and physical health, as well as the social well-being of the population. Under the background of epidemic prevention and control in COVID-19, it is significant to strengthen the training of GPs. Based on the current situation, we put forward the following suggestions. First, through the cultivation of comprehensive ability, the professional competitiveness of GPs can be improved.[4,12] In terms of training content, it is necessary to cultivate GPs' ability to manage patients and solve problems, including rational use of limited medical resources.[12] On the other hand, we should focus on improving GPs' public health knowledge, so that they can master the basic infectious disease emergency handling ability.[3,6] The training bases should increase the proportion of doctor–patient communication and clinical basic skills courses, and pay attention to the cultivation of integrated thinking and cooperative thinking.[12] In United Kingdom, the teaching content of GPs include teamwork and humanistic quality, teaching research and quality evaluation, community management, and benefit analysis.[15,16] The United States effectively combines general practice education with humanities education, and offers practice-oriented courses at the early stage of undergraduate education, encouraging students to actively participate in community practice.[8] High-quality practical experience not only enhance the professional skills of medical students, but also increase their interest in becoming GPs.[17] The second is to strengthen the professional confidence of GPs and encourage more medical students to engage in general practice. According to a survey,[18] Chinese GPs generally hold a negative attitude towards their professional status, which was mainly reflected in income level, occupational risk, and social respect, but they were optimistic about the development expectations in the next 3 years.[14] In recent years, China's Ministry of Health has greatly improved the quantity and

quality of GPs through targeted training and talent introduction.[9] During the COVID-19 epidemic, most GPs actively participated in the prevention and control of the epidemic, which enhanced their professional identity and self-confidence. The government should take measures to improve the professional attraction of GPs, such as raising their salaries and social status.[4] With the efforts of the German government,[17] the salary gap between specialists and GPs is narrowing, and the attractiveness of GPs is also increasing. As mentioned in this study,[1] GPs expected to be rewarded, not necessarily financially, but through respect and consideration. In addition, the positive evaluation of job content is the main predictive factor for medical students to choose to become GPs,[17] so the news media should actively report the progress of general practice.[9] Finally, we should help GPs fully realize their health mission and responsibility.[4,19] Nowadays, some people have prejudice against GPs, which has a negative impact on medical students' career choices and the development of general practice.[9,18] It is necessary to change the public's cognitive prejudice and traditional employment concept, and guide GPs to realize their professional value in grass-roots work.

The COVID-19 outbreak has refocused attention on the "first in last out" role of the GPs and has reinforced the effort for widespread availability of qualified GPs in China. Through remarkable individual and team efforts, displaying truly professional general practice, the role of family medicine in the Chinese health sector is now well recognized.[2] GPs have demonstrated remarkable contributions to all the 3 stages of response as advocated by WHO. Although each country has its own special institutional environment, policy, and culture, the global spread of the COVID-19 epidemic has no national boundaries.[19] Other countries can consider learning from China's experience and lessons, and adjust their strategies according to their own conditions.

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