### **PERSPECTIVE**

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# Public health competences through the lens of the COVID-19 pandemic: what matters for health workforce preparedness for global health emergencies

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## **Abstract**

The COVID-19 pandemic is raising new questions on public health competences and leadership and on health workforce preparedness for global public health emergencies. The present commentary aims to highlight demand and opportunities for innovation through the disruptions caused by the COVID-19 crisis. We review the public health competency framework recently launched by WHO and ASPHER through the lens of COVID-19. The framework provides guidance for aligning public health and global health competences across sectors and professional groups. Five critical competency areas can be identified in relation to public health emergencies: (1) flexibility, adaptation, motivation, communication, (2) research, analytical sensitivity, ethics, diversity, (3) epidemiology, (4) preparedness and (5) employability. However, this may not be enough. New models of public health leadership and changes in the health workforce are needed, which transform the silos of professions and policy. Such transformations would include learning, working, leading and governing differently and must stretch far beyond the public health workforce. To achieve transformative capacity, critical public health

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competences must be considered for all healthcare workers on all levels of policymaking, thus becoming the 'heart' of health workforce resilience and pandemic preparedness.

#### **KEYWORDS**

healthcare workers, pandemic preparedness, public health competences, public health leadership, COVID-19

# 1 | INTRODUCTION

The COVID-19 pandemic puts in the spotlight the strengths and weaknesses of the human resources for health, their competency and preparedness for public health emergencies, as well as the connectedness of public health and global health issues. The exceptional circumstances of COVID-19 disrupted health systems globally. They forced sudden changes to how to prepare individuals for times of uncertainties and the changes and challenges they most probably would face during the 'new normal' era to come. There are several critical aspects that have an impact on rethinking competency development for public health and other healthcare professionals in times of COVID-19 and post-pandemic.

First, never more than now, 'working differently means leading and learning differently'. 1.2 When societies and individuals experience sudden and radical change due to social isolation, the immediate need to shift to distance and online modalities and the need to work remotely or in extremely restricted workspaces for a long period of time, these conditions not only require a technical push towards digitalisation, but new leadership qualities of empathy and flexibility. They call for more open and transparent communication, innovation and wellbeing in order to keep colleagues engaged and motivated. 3.4

Second, the current COVID-19 pandemic disruptions show that we need a blend of scientific, evidence based approaches and empathy. This translates into strengthening research skills, analytical reasoning, as well as sensitivity to social inequalities with ethics and respect for human diversity.

Third, we are currently observing an increased need for epidemiological competency, strongly reinforced by the European roadmap to lifting the containment measures<sup>5</sup> and increased demand for these skills among public health employer organisations.<sup>6</sup>

Fourth, the COVID-19 period revealed serious gaps also in competences related to preparedness, which is defined as 'the ability of governments, professional response organizations, communities, and individuals to anticipate and respond effectively to the impact of likely, imminent or current hazards, events or conditions'. These competences include our recent experiences with pandemics, climate change or migration. Public health professionals are at the frontline when it comes to employing protective behaviours and surveillance tools, and they are actively engaged in transforming the health workforce to better fit new demand. 3,9,10

Finally, the pandemic has shown that we need coping, foresight and employability competences required for the post COVID-19 era. This era is full of challenges and instability, where agility, curiosity, risk mitigation, learning by exploring, learning by doing as well as critical technological competency and digital skills will be the norm for both survival and competitiveness. The need for such competences has been powerfully identified and developed by the European Union (EU) New Skills Agenda. <sup>11</sup>

The present commentary aims to highlight challenges as well as capacity for innovation and transformation through the disruptions caused by the COVID-19 crisis. This calls for shifts and expansion of the scope of competences of the healthcare workforce, and ultimately for a new paradigm of public health competences and leadership. Drawing on the public health competency framework recently launched by WHO and ASPHER, <sup>12</sup> we suggest a 'stress test' of the framework through the lens of COVID-19. The aim is to identify, through a critical reassessment of the competences, new demand for public health and global health competences and transformative capacity of public health leadership to strengthen health workforce preparedness for global health emergencies.

# 1.1 Re-assessing public health competences through the lens of COVID-19

Originally, 'competences' refer to a set of knowledge, skills, and values (attitudinal or personal aspects, etc.) that represent context-bound performance. Competences transcend the boundaries of specific disciplines, thus moving beyond of what is called 'silo politics' or 'tribalism' of professional groups<sup>13</sup> and providing the building blocks for effective public health practice and the application.

In defining and developing competences, the WHO-ASPHER Competency Framework for Public Health Workforce illustrates an interdisciplinary, inter-professional and lifelong learning approach to public health. While this Framework is designed to provide a comprehensive and integrated picture of public health competency concentrations, it also illustrates the critical competency areas needed for disruptive situations of healthcare systems and beyond. Five critical competency areas can be identified in relation to disruptions and public health emergencies (1) flexibility, adaptation, motivation and communication, (2) research, analytical reasoning and sensitivity, ethics, respect to diversity, (3) epidemiology, (4) preparedness, and (5) employability. Table 1 below provides examples of competences relevant for the five critical areas. 12

The question remains, is this enough to strengthen health workforce pandemic preparedness?

The answer to this question is 'no'. The Public Health Competences Framework<sup>12</sup> identifies critical competences for pandemic preparedness, but this is just one step forward. It is important to mitigate and eliminate the risks of missing any important competency that might be needed by public health or other healthcare professionals and thus must be adequately addressed by education, training, skills and experience. We would therefore like to propose formulating additionally and more specific and granular competences in the identified areas. Critical new demand may include (but may not be limited to):

- Preparedness competences of public health professions in the context of global disease outbreaks and coping
  with uncertainties and unplanned events<sup>10</sup>
- Transformative leadership and crisis communication, which have proven to be essential to the educational response to the pandemic<sup>4,14</sup>
- Emergency risk communication to provide up-to-the-minute information, requiring both competency and expertise
- Acknowledging uncertainty, requiring honesty, openness and transparency
- Demonstrating concern for the emotional stress of the situation, for example, empathy and caring, commitment and dedication<sup>15</sup>
- Resilience to meet the variety of professionally diverse healthcare workers and the distinct social and institutional conditions

The current COVID-19 crisis is having, and will continue to have, a huge impact on human resources for health at the individual and institutional levels, at global and national/local levels, as well as across and beyond these levels. For instance, at the institutional level, the pandemic brings into the spotlight the role of leaders and leadership in reshaping their organisations to survive during and after the crisis, and the need for strengthening public health approaches to leadership and policymaking.<sup>4</sup> At the individual level, it is reminding us on the 'human face' of the health workforce<sup>16</sup> and the healthcare needs of the workers, including classic public health competences (e.g., hygiene) and personal protection equipment, as well as new competences in mental healthcare, emergency and risk communication, to mention only few examples. At the global and national levels, knowledge of health systems and governance, policy processes and global public health is indicative to understand global-local connectedness and use the available range of policy and governance tools most effectively to respond to the pandemic crisis.

TABLE 1 Areas of critical public health competences and examples

Areas of competences	Examples
Flexibility, adaptation, motivation, communication	<ul> <li>Inspires and motivates others to work towards a common vision, programme, and/or organisational goals (5.1)</li> <li>Acts as a role model, builds trust and demonstrates positive and engaging behaviour (5.2)</li> <li>Demonstrates practicality, flexibility and adaptability in the process of working with others, emphasising the achievement of goals as opposed to rigid adherence to traditional and commonly used work methods (5.6)</li> <li>Communicates and shares information and responsibility effectively at different organisational levels to gain political commitment, policy support and social acceptance for a particular health goal or programme (7.2)</li> <li>Communicates facts and evidence effectively within the context of translating science and evidence into practice and policy for various actors in the system and populations of concern in particular to increase the effectiveness of responses to risks, threats and damages to health (7.3)</li> </ul>
Research, analytical sensitivity, ethics, diversity	<ul> <li>Designs and conducts qualitative and/or quantitative research which builds on existing evidence and adds to the evidence base for public health practice, involving relevant stakeholders in this process (1.7)</li> <li>Evaluates local public health services and interventions applying sound methodology based on recognised evaluation models (1.8)</li> <li>Understands and applies cultural awareness and sensitivity in communication with diverse populations (7.5)</li> <li>Acts according to ethical standards and norms with integrity, promotes professional accountability, social responsibility and the public good (9.3)</li> <li>Acts upon and promotes evidence-based professional practice (9.5)</li> </ul>
Epidemiology	<ul> <li>Knows the features of demographic structure in a given society/community and understands the process of demographic change and its implications for public health (1.1)</li> <li>Is able to describe the key features of the epidemiology of the significant causes of morbidity and mortality in the population for which they have responsibility (1.2)</li> <li>Uses vital statistics and health indicators effectively to increase knowledge and generate evidence about population health, including within atrisk and vulnerable groups (1.3)</li> </ul>
Preparedness	<ul> <li>Understands the local implications of the One Health approach, its global interconnectivity (interdependencies among human, animal, plant, environment) and its impact on health conditions in the population (4.1)</li> <li>Critically analyses the changing nature, key factors and resources that shape One Health in order to influence actions (emergency preparedness planning and response) at the local and international level (4.2)</li> <li>Knows and participates in the development and application of multisectorial evidence-based guidelines and systems for surveillance, prevention and control of diseases and other acute public health events (4.7)</li> <li>Performs surveillance of risks and threats to the full continuum of factors that influence and determine health in order to identify intervention needs (4.8)</li> <li>Knows and correctly identifies the main features of the climate change process, along with its implications for public health and understands the public health responsibility for the natural environment (4.11)</li> </ul>
	(Continues)

(Continues)

#### TABLE 1 (Continued)

Areas of competences	Examples
Employability	<ul> <li>Demonstrates practicality, flexibility, and adaptability in the process of working with others, emphasising the achievement of goals as opposed to rigid adherence to traditional and commonly used work methods (5.6)</li> <li>Shows entrepreneurial orientation through pro-activeness, innovativeness, risk-taking, generating potential solutions to critical situations and evaluating their feasibility (10.1)</li> <li>Demonstrates persistence, perseverance resilience and the ability to call upon personal resources and energy at times of threat or challenge (10.2)</li> <li>Applies methodologies, (digital) technologies and good practices for the management, analysis and storage of data and health information (10.6)</li> <li>Understands and applies a range of relevant information technology tools, social media and software (10.7)</li> </ul>

Sources: Authors' own table, based on the WHO-ASPHER Framework<sup>12</sup>; numbers in brackets relate to the numbering in the Framework.

### 2 | CONCLUSION

The COVID-19 pandemic has highlighted the need for public health competences and urgency of health workforce innovation. In a post-pandemic era, public health leadership should become the 'new normal' of health systems and health workforce planning, education, policy and governance. However, the pandemic did not tell us how to make change happen and transform entrenched professional and political silos. We suggested to use the Public Health Competences Framework as a springboard and were able to identify a set of critical competences. The next step must now be to further develop and implement new approaches.

Three major conclusions are emerging from our analysis. First, innovating public health competences stretches far beyond individual competence development. Moreover, it is about resilience and preparedness and calls for learning, working, leading and governing differently. Second, critical public health competences are not limited to the public heath workforce, but must become relevant for all healthcare professions. Third, public health must be considered in all areas and at all levels of health workforce education, planning, policy and governance to achieve transformative capacity towards improved health workforce resilience and preparedness for global public health emergencies.

#### **CONFLICT OF INTERESTS**

Authors declare that they have no conflict of interest.

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