### **BMJ** Global Health

# After the Astana declaration: is comprehensive primary health care set for success this time?

Christian Kraef 💿 , Per Kallestrup

### ABSTRACT

To cite: Kraef C, Kallestrup P. After the Astana declaration: is comprehensive primary health care set for success this time?*BMJ Global Health* 2019;**4**:e001871. doi:10.1136/ bmjgh-2019-001871

#### Handling editor Seye Abimbola

Received 25 July 2019 Revised 7 October 2019 Accepted 12 October 2019 Primary health care (PHC) strengthening in order to achieve the Sustainable Development Goal has again, 40 years after the Alma-Ata declaration, been declared a priority by the global health community. Despite initial progress the Alma-Ata vision of Health for All by the year 2000 was not realised. In this analysis we (1) examine the challenges that comprehensive PHC faced after the Alma-Ata declaration, (2) provide an analysis of the current opportunities and threats to comprehensive PHC strengthening on the global, national and community level and (3) review the most important policy recommendations and related evidence to address these threats for success of the Astana declaration.

Factors that are predominantly opportunities are the treasure of historical lessons from the past 40 years, the increased attention to social and environmental determinants of health, the global economic growth and new technologies, in particular digital medicine, which also have the potential to revolutionise community involvement. Factors that are currently predominantly threats are insecurity, conflicts and disease outbreaks; lack of sustained political commitment and inappropriate monitoring and evaluation structures; inappropriate and unsustainable financing models; insufficient health workforce recruitment, employment and retention; missing support of physicians and their professional organisations: inadequately addressing the needs of the community and not giving attention to gender equity. In contrast to the policy and evidence context in 1978 when Alma-Ata was passed there are today policy recommendations and a large body of evidence that can address the threats to comprehensive PHC-and turn them into opportunities.

### Summary box

- Understanding the historical challenges to Alma-Ata that impeded the declaration's success can help improve policy for comprehensive primary health care (PHC) today.
- Contemporary factors that are predominantly opportunities for PHC are the treasure of historical lessons from the past 40 years, the increased attention to social and environmental determinants of health, the global economic growth and new technologies, in particular digital medicine, which also have the potential to revolutionise community involvement.
- Factors that are currently predominantly threats are insecurity, conflicts and disease outbreaks; lack of sustained political commitment and inappropriate monitoring and evaluation structures; inappropriate and unsustainable financing models; insufficient health workforce recruitment, employment and retention; missing support of physicians and their professional organisations; inadequately addressing the needs of the community and not giving attention to gender equity.
- In contrast to the policy and evidence context in 1978, when Alma-Ata was passed, there are today policy recommendations and a large body of evidence to adequately address the threats to comprehensive PHC.
- If sincere political commitment can be maintained, comprehensive PHC systems, which integrate global health priorities and effectively improve health outcomes in a cost-efficient and equitable way, can become a global reality.

### Check for updates

© Author(s) (or their employer(s)) 2019. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

Centre for Global Health, Department of Public Health, Aarhus University, Aarhus, Denmark

**Correspondence to** Dr Christian Kraef; christiankraef@gmail.com

### BACKGROUND: WHAT CHALLENGES DID COMPREHENSIVE PRIMARY HEALTH CARE FACE AFTER ALMA-ATA?

The Astana Declaration has renewed the political commitment from member states of the WHO and other global organisations for Universal Health Coverage (UHC) and the principles of primary health care (PHC). These were first enshrined in the declaration of Alma-Ata in 1978 which elevated health to a fundamental human right, based on the principles of equity and community participation.<sup>1</sup>

Moreover, it positioned person-centred PHC as the key to Health for All and made access to basic health services a development priority.<sup>2</sup>

Despite initial progress and the adoption of the principles of PHC as an official blueprint for reorientation of health systems throughout the world, the vision of Health for All by the year 2000 was not realised.<sup>3 4</sup> The global push for implementation of PHC quickly stalled in favour of more vertical single disease focused approaches, more neoliberal development policies and structural



### **BMJ Global Health**

readjustment programme driven by the International Monetary Fund (IMF) and the World Bank. Marketdriven 'health sector reforms' assumed the efficiency of free markets, the 'trickle-down effect' of rapid economic development, and deprioritised UHC and PHC.<sup>5</sup> More so, it could be demonstrated that the neoliberal agenda has in some countries (eg, Australia) led to less comprehensive PHC services.<sup>6</sup> The appearance of large private health focused philanthropies with a preference for measurable quick-fix solutions for clearly defined problems and diseases and the nature of the global response to the HIV epidemic with vertical global health initiatives that bypassed country health systems, competed for human resources and influenced policies, reinforced the political trend away from comprehensive PHC and UHC.<sup>7</sup>

Furthermore, comprehensive PHC was criticised for being too idealistic and unrealistically broad. One of the key principles-giving leadership to the respective communities-was not widely accepted and received hesitant responses from the development community and technical experts. Instead, the concept of selective PHC was introduced emphasising the focus on growth monitoring, oral rehydration therapy, breast feeding and immunisation.<sup>8</sup> In addition, patients and health care professionals often misclassified PHC as a 'cheap' and less prestigious form of medicine. Some physicians inside and outside of WHO perceived Alma-Ata's human rightsbased agenda as an attack on the medical establishment. Patients tried to bypass under-resourced and understaffed PHC systems despite substantial additional time and financial costs. This phenomenon was shown to occur across all income groups and was dependent on quality of care (including lack of diagnostic facilities, drugs, closed health facilities and lack of skilled health workers) in studies in Asia and Africa.<sup>9</sup> This was compounded by problems to recruit and retain physicians and other professionals in (rural) PHC settings.<sup>10</sup> Issues of governance, political crises, civil unrests and natural disasters made donors hesitant of funding comprehensive health programme.<sup>11</sup>

The Astana Declaration of 2018, 40 years after Alma Ata, was passed to provide a new impetus for strengthening PHC and to accelerate progress towards the Sustainable Development Goals (SDGs). In parts it is based on the reoccurring realisation that the pendulum had swung too far towards a focus on individual diseases and vertical programme, resulting in siloed approaches.<sup>12</sup> Thus, the three pillars of PHC endorsed in the Astana declaration are community empowerment, multisectoral policies and actions, and integrated delivery of quality primary care and public health services.<sup>3</sup>

To understand today's conditions for success of the Astana declaration we provide an analysis of the current opportunities and threats to comprehensive PHC. We argue that, in contrast to the context in 1978 when Alma-Ata was passed, the global health community today has policy solutions and a large body of evidence to

adequately address the threats to comprehensive PHC and turn them into opportunities.

### OPPORTUNITIES: ARE WE BETTER PLACED THIS TIME FOR THE REALISATION OF COMPREHENSIVE PHC?

Forty years for learning historical lessons since Alma-Ata have provided a wealth of knowledge. Some of the most important experiences can be derived from vertical programme such as the Polio Eradication Initiative, the dracunculiasis eradication programme, national immunisation days, and more recently the HIV/AIDS response.<sup>13</sup> Vertical programme are expensive, come at high opportunity costs (including policy distraction) and are not sustainable if not embedded in robust horizontal (ie, PHC) structures. This is underlined by the costly response to HIV, which exhibited that it was not until a more comprehensive and including 'integrated approach' was initiated that the complex comorbidities and challenges of the HIV/AIDS epidemic could be addressed.<sup>14</sup> On a more political level, the detrimental impact structural adjustment programme had on equitable access to quality and affordable health care and on social determinants of health (eg, income and food availability) stand as a reminder of the limitations of neoliberal policies for achieving Health for All. These marketoriented health sector reforms were driven by the IMF and the World Bank since the late 1970s and centred around economic stabilisation, liberalisation, deregulation and privatisation.<sup>15</sup> The concomitant decrease in public health care spending reduced the capacity of PHC systems. At the same time private insurance and user financed health care drove the development of highly specialised and tertiary care for the well-off.<sup>2</sup> More recently, the Ebola crises in West Africa and the Democratic Republic of the Congo have demonstrated that health emergencies can only be detected, prevented and controlled in an efficient and timely manner if robust PHC systems exist.<sup>16</sup> A large proportion of over-mortality during and after the epidemic was not due to Ebola itself but to a 'second hit' to an already non-functioning PHC system. These experiences have led to the recognition that 'there is no blueprint for universal implementation of PHC', that 'PHC policy implementation is a complex process that develops over time and with experience'.<sup>2</sup> An important positive example is Thailand where since the introduction of a tax-based UHC system with wellcoordinated district health systems in 2002 'essential preventive, curative and palliative health services at all life stages are provided' to every Thai citizen. This significantly reduced out of-pocket spending and households suffering catastrophic health spending. Primary care units were strengthened, shifting the focus from hospital to family practitioners in communities.<sup>17</sup> In Kerala, a state in India, PHC was decentralised and brought under the control of local governments (panchayats) in 1996. This has led to a decrease in health care spending and a reduction in utilisation of health care services.<sup>18</sup> These,

and many other lessons, can be used by policy makers and other stakeholders to improve the implementation of comprehensive PHC today.

The recent focus on multisectoral thinking in the SDGs align well with the goals of comprehensive PHC and gives better impetus to the PHC movement. The 20th century was marked by rapid scientific advances in medicine which at times led to overoptimistic expectations and orientation towards purely biomedical solutions to health problems.<sup>19</sup> Distal determinants of health and the importance of multisectoral policy approaches have, over the last years, gained their due recognition. Important examples which have recently (re-)emerged as major systematic issues for global health policy making are climate change, air pollution and environmental degradation.<sup>20</sup> The term 'commercial determinants' of health has been coined to denote the detrimental influence strategies and approaches used by the corporate sector have on the health of populations.<sup>21</sup> These determinants are to a large degree co-responsible for the global rise of non-communicable diseases (NCDs) and the epidemiological transition observed in many low-income and middle-income countries (LMICs). The complex health impacts of these environmental, social and commercial determinants of health can best be addressed by comprehensive, community-centred and inclusive PHC systems where acute and chronic diseases are treated and population level primary prevention can be leveraged. There is accumulating evidence that countries that re-orientate their health systems towards primary care are better placed to achieve the SDGs.<sup>22</sup> Furthermore, PHC systems could co-create the platforms for multisectoral thinking, policy making and community involvement that are needed to mitigate the root causes of climate change, environmental degradation and market forces.<sup>23</sup>

The **global economic development** over the last four decades has provided many countries across the world with more disposable resources for investment in health care systems.<sup>24</sup> It is 'estimated that global spending on health will increase from US\$9.21 trillion in 2014 to US\$24.24 trillion in 2040'.<sup>25</sup> The burgeoning educated middle-class is an important political force determining election outcomes in LMICs. Those living in rural and sub-urban areas in countries such as India have access to online information and are creating pressure on local PHC structures and politicians to provide the same high-quality care available in urban centres.<sup>26</sup>

Further, these **new technologies, including digital health solutions**, can play an important role in quality first line health care provision and improving health systems.<sup>27</sup> The increased access to information and medical knowledge, monitoring of quality of care and electronic health records can enable more effective and efficient care, improve patients' safety and their successful journey in a health care system. Telemedicine and mobile health allow secondary and tertiary specialist care to be integrated in remote and primary care structures to improve person-centred care. Furthermore, increased digitalisation of

health systems allow the structured gathering and analysis of disaggregated health care data which can also be used for timely detection and response to health emergencies.<sup>28</sup> Moreover, patients and communities need to be involved in the planning and delivery of services and taking individual responsibility for prevention and self-care. Digital technologies hold the potential to revolutionise the role of patients by providing access to information and empowering them to take informed decisions and demanding the provision of an adequate standard of health care.

## THREATS TO COMPREHENSIVE PHC: FROM THE GLOBAL TO THE COMMUNITY LEVEL

Insecurity, conflicts and disease outbreaks are threatening health care around the world.<sup>29</sup> In particular, structures of PHC such as community health centres and small hospitals are often the most vulnerable to violence, conflict and war.<sup>30</sup> In other areas, particular diseases (eg, malaria) or outbreaks (eg, Ebola) lead to a disproportional disease burden destabilising the existing PHC structures. The conflict in Syria for instance has in addition to the direct harm through acts of violence lead to emigration of up to 70% of the health workforce, destruction of 38% of primary care facilities, the re-emergence of polio, 5% of children suffering from severe malnutrition, and a spike in mental illness.<sup>31</sup> The declaration of Astana and the UN High-Level meeting on UHC in September 2019 have shown the extent of current political commitment to PHC. However, sustaining existing structures and improving PHC provision is threatened by lack of sustained political commitment and inappropriate monitoring and evaluation structures. The increasing frequency of UN high-level meetings with a health theme (Antimicrobial Resistance (2016), NCDs/ Tuberculosis (2018) and UHC (2019)) illustrate the short attention span given to individual topics. This is reflected in the current progress indicators for the SDGs, which do not include PHC indicators.<sup>32</sup> If no appropriate and sustainable financing models that enable openness, inclusiveness and comprehensive coverage are implemented, PHC will not be equitable and fail. 50% of the world's population is not covered by UHC where health care is free or at very low cost at the point of care.<sup>33</sup> As a consequence 100 million people are pushed into poverty because of disease every year.<sup>33</sup> There has only been tepid improvement; a recent analysis of the patterns of global health financing between 1995 and 2014 by the Global Burden of Disease Health Financing Collaborator Network found that low-income and lower-middleincome countries 'increased spending in absolute terms the least, and still rely heavily on out-of-pocket spending and development assistance'.<sup>34</sup>

Moreover, implementing and sustaining quality PHC systems, in particular in LMICs, is threatened by insufficient health workforce recruitment, employment and retention. Not only the numbers, but also

Table 1         Threats, policy recommendations and key references		
Threats	Policy recommendations	Key references
Insecurity, conflicts and disease outbreaks	<ul> <li>Position Universal Health Coverage and primary health care as central to global security and prosperity</li> <li>Design PHC systems conflict-resilient and as part of prevention, early detection and mitigation of disease outbreaks</li> <li>Use the rebuilding of the health sector after conflict as an opportunity to correct failures in the preconflict health systems</li> </ul>	<ul> <li>Global health security and universal health coverage: from a marriage of convenience to a strategic, effective partnership in <i>BMJ Global Health</i> 2019<sup>52</sup></li> <li>Primary health care and health emergencies. WHO 2018<sup>53</sup></li> <li>Rehabilitating health systems in post-conflict situations. United Nations University World Institute for Development Economics Research 2007<sup>54</sup></li> </ul>
Lack of sustained political commitment and appropriate monitoring and evaluation structures	<ul> <li>Ensure that PHC is a central part of the SDG and the UHC agendas</li> <li>Generate political support for broad implementation of indicators such as the Primary Health care Performance Initiative 'Vital Signs Profiles' on national levels</li> <li>Evaluate stewardship, financing, resource generation and service delivery</li> </ul>	<ul> <li>Revisiting Alma-Ata: what is the role of primary health care in achieving the Sustainable Development Goals? <i>The Lancet</i> 2018<sup>22</sup></li> <li>Indicator Library of the Primary Health care Performance Initiative 2019<sup>55</sup></li> <li>Primary Care Evaluation Tool of WHO (Europe) 2010<sup>56</sup></li> </ul>
No appropriate and sustainable financing models	<ul> <li>Invest significantly in tax-based UHC systems free at the point of care with financing models adapted to the local context</li> <li>Incentivise team-based and community-oriented PHC, including value-based contracting and capitation-based elements</li> <li>Support research on '(1) interventions to limit out-of-pocket costs; (2) financing models to enhance health system performance and maintain PHC budgets; (3) the design of incentives to promote optimal care without unintended consequences and (4) the comparative effectiveness of different PHC service delivery strategies using local data'</li> <li>Foster ODA in PHC in a way that reinforces shared priorities (eg, NCDs, preparedness and PHC agendas can be mutually reinforcing)</li> <li>Create multisectoral 'health in all policies' frames that allow for synergies and the inclusion of resources from others sectors to achieve health related outcomes</li> </ul>	<ul> <li>Guide posts for investment in primary health care and projected resource needs in 67 low-income and middle-income countries: a modelling study in Lancet Global Health 2019<sup>57</sup></li> <li>Community-orientated primary care: a scoping review of different models, and their effectiveness and feasibility in sub-Saharan Africa in BMJ Glob Health 2019<sup>58</sup></li> <li>Primary health care financing interventions: a systematic review and stakeholder-driven research agenda for the Asia-Pacific region in BMJ Glob Health 2019<sup>59</sup></li> <li>Reimagining development assistance for health in the New England Journal of Medicine 2019<sup>60</sup></li> <li>Identifying health policy and systems research priorities on multisectoral collaboration for health in low-income and middle-income countries in the<sup>2</sup> BMJ Global Health 2018<sup>61</sup></li> </ul>
Insufficient health workforce recruitment, employment and retention	<ul> <li>Prioritise public investment in training new appropriately skilled and competent PHC providers</li> <li>Create a positive practice environment and manage local human resources effectively adapted to the community need</li> <li>Set-up multiprofessional health care teams, led by physicians, midwives and nurses, supplemented by other health professionals and community health workers (CHWs)—making best use of the skills and resources available in the respective setting</li> <li>Allow task shifting, in particular in settings with health workforce shortages</li> </ul>	<ul> <li>Health professionals for a new century: transforming education to strengthen health systems in an interdependent world in <i>The</i> <i>Lancet</i> 2010<sup>62</sup></li> <li>Human resources for health and universal health coverage: fostering equity and effective coverage in Bulletin of the World Health Organization 2013<sup>63</sup></li> <li>Expanding the Role of Nurses in Primary Care. The Pan American Health Organization 2018<sup>64</sup></li> <li>Community health volunteers could help improve access to and use of essential health services by communities in LMICs: an umbrella review in Health Policy and Planning 2018<sup>65 66</sup></li> </ul>
Missing support from the physicians and the medical profession	<ul> <li>Involve physicians in decision making adequate to their expertise and role in the health care system to ensure a shared agenda</li> <li>Further establish family medicine professionally, academically and within the medical profession</li> </ul>	<ul> <li>General Practitioners: Allies or Enemies of Primary Health Care in Scandinavian Journal of Primary Care 1984<sup>41</sup></li> <li>Strengthening Primary Care Through Family Medicine Around the World Collaborating Toward Promising Practices in Family Medicine 2018<sup>67</sup></li> </ul>

Table 1 Continued			
Threats	Policy recommendations	Key references	
Addressing the needs of communities inadequately	<ul> <li>Support health literacy to ensure patients can navigate health care systems efficiently and make appropriate health decisions</li> <li>Involve patients and communities in health systems design and local solutions</li> <li>Identify and consider local power structures when implementing participation</li> </ul>	<ul> <li>Improving health literacy in community populations: a review of progress in Health Promotion International 2018<sup>68</sup></li> <li>Examining the links between community participation and health outcomes: a review of the literature in Health Policy and Planning 2014<sup>44</sup></li> <li>Community participation for transformative action on women's, children's and adolescents' health in Bulletin of the World Health Organization 2016<sup>69</sup></li> </ul>	
No attention to gender equity	<ul> <li>Make the PHC sector and workforce a role model for gender equity by integrating a gender perspective into all health policies and programme</li> <li>Mainstreaming gender in pre-service and in-service training of all health professionals</li> </ul>	<ul> <li>Gender, women and primary health care renewal: a discussion paper. WHO 2010</li> <li>Gender and global health: evidence, policy and inconvenient truths in the <i>Lancet</i> 2013<sup>48</sup></li> </ul>	

NCD, non-communicable disease; ODA, Official Development Assistance; PHC, primary health care.

the distribution, quality and skills mix of these professionals is of paramount importance.<sup>35</sup> About half of the UN member states have fewer than one physician per 1000 inhabitants.<sup>36</sup> Globally, up to 18 million additional physicians, nurses and other health professionals are needed to staff the desired PHC systems as projected by the High-Level Commission on Health Employment and Economic Growth.<sup>37</sup> Each category of the health workforce (eg, physicians, nurses/midwives, community health workers) needs to be considered individually. For physicians one of the major challenges is development, recruitment and retention of primary care practitioners in the places they are most needed.<sup>38</sup> Nurses and midwives have often been constrained to practice to the full scope of their potential by regulation and redtape.<sup>39</sup> The last decade's inconsistent support of community health workers and failure to integrate them into existing health systems have impeded their broad implementation.<sup>40</sup> Comprehensive PHC systems and optimal health workforce employment will not be successful if support of physicians and their professional organisations is missing. In most countries, physicians have due to their number, a central role in health care and powerful professional organisations an outsized influence on health systems design and organisation of care. Already in 1984, the WHO Europe Regional Officer for PHC cautioned that 'general practitioners can either be a powerful ally or a major roadblock in the development of PHC in the spirit of the Alma-Ata Declaration'. In particular the specialist notion of 'poor care for poor people' and the fear of task sharing is detrimental.<sup>41</sup> On the other hand, physicians can be an important advocate for the interests of the local community as PHC does not function optimally when not adequately addressing the needs of the community.<sup>42</sup> But even in high income countries, community participation is still no routine.<sup>43</sup> Community participation has a prominent role in the global debate about PHC and most policy makers have

accepted the concept as an important element in health systems design.<sup>44</sup> Institutionalising community participation on the ground, however, has proved more difficult. An analysis of service providers' views in PHC in Australia revealed that the most commonly reported barriers to community participation were budget and lack of flexibility in service delivery.<sup>45</sup> In India, Village Health Sanitation and Nutrition Committees have improved participatory community health governance but suffer from lack of integration with rigid and unresponsive government administrative structures.<sup>46</sup>

No attention to gender equity is a threat to global health in two ways.<sup>47</sup> First, the burden and presentation of diseases is gender specific. The major contributors to the global burden of disease are disproportionally found in men, who suffer higher morbidity and shorter life spans. On the other hand community norms and power structures in many places around the world reinforce the vulnerability of women and transgender people to among other things adverse reproductive and sexual health outcomes.<sup>48</sup> In India for instance, only five persons per family are eligible for coverage under the main social protection scheme (RSBY) which often leaves girls and elderly women without financial coverage.<sup>49</sup> Second, women contribute crucially to health care (eg, as female community health workers, nurses, physicians, community leaders). Women contribute about US\$3 trillion annually to health systems-half of it unpaid-which led the Lancet Commission on Women and Health to call them 'the drivers of wealth and health of nations'.<sup>50</sup> Women are often the drivers of community and family health and make up a majority of the (informal) PHC workforce and not acting on gender discrimination will lead to health system inefficiencies.<sup>51</sup>

In contrast to the policy and evidence context in 1978 when Alma-Ata was passed there are today policy solutions and a large body of evidence to adequately address the threats to comprehensive PHC. Table 1 provides an overview of some policy solutions and some key evidence references for the threats listed above.

### **CONCLUSION**

On a macro-level comprehensive PHC receives high-level political commitment and attention. Most importantly, however, the treasure of historical lessons from the past 40 years, the increased attention to social and environmental determinants of health, the global economic growth and new technologies, in particular digital medicine, which also have the potential to revolutionise community involvement are significant opportunities for making the Astana declaration a success—in particular in LMICs. There are, however, a considerable number of threats: insecurity, conflicts and disease outbreaks: lack of sustained political commitment and inappropriate monitoring and evaluation structures; inappropriate and unsustainable financing models; insufficient health workforce recruitment, employment and retention; missing support of physicians and their professional organisations; inadequately addressing the needs of the community and not giving attention to gender equity. In contrast to the policy and evidence context in 1978, when Alma-Ata was passed, there are today policy recommendations and a large body of evidence to adequately address the threats to comprehensive PHC. If sincere political commitment can be maintained, comprehensive PHC systems, which integrate global health priorities and effectively improve health outcomes in a cost-efficient and equitable way, can become a global reality.

**Contributors** CK and PK conceived of the presented idea. CK developed the structure and wrote the draft PK supervised the work. Both authors discussed the results and contributed to the final manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

**Data availability statement** There was no data, expect those refertenced in the reference list, used because this is an analysis.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

#### ORCID iD

Christian Kraef http://orcid.org/0000-0002-5224-0335

#### REFERENCES

- UNICEF., World Health Organization., & International Conference on Primary Health. Declaration of Alma-Ata International Conference on primary health care, Alma-Ata, USSR, 6–12 September 1978. *Development*, 1978:159–61.
- Rifkin SB. Alma Ata after 40 years: primary health care and health for All-from consensus to complexity. *BMJ Glob Health* 2018;3:e001188.
- 3. The Lancet. The Astana declaration: the future of primary health care? *The Lancet* 2018;392.

- Hall JJ, Taylor R. Health for all beyond 2000: the demise of the Alma-Ata Declaration and primary health care in developing countries. *Med J Aust* 2003;178:17–20.
- World Development Report 1993. Investing in Health [Internet]. Available: https://openknowledge.worldbank.org/handle/10986/5976 [Accessed 18 Mar 2019].
- Baum F, Freeman T, Sanders D, et al. Comprehensive primary health care under neo-liberalism in Australia. Soc Sci Med 2016;168:43–52.
- Mwisongo A, Nabyonga-Orem J. Global health initiatives in Africa – governance, priorities, harmonisation and alignment. *BMC Health Serv Res* 2016;16.
- Warren KS. The evolution of selective primary health care. Soc Sci Med 1988;26:891–8.
- Akin JS, Hutchinson P. Health-Care facility choice and the phenomenon of bypassing. *Health Policy Plan* 1999;14:135–51.
- WHO. Primary health care concepts and challenges in a changing world : Alma-Ata revisited / E. Tarimo, E. G. Webster [Internet]. Available: https://apps.who.int/iris/handle/10665/62650 [Accessed 18 Mar 2019].
- 11. Ghebreyesus TA, Fore H, Birtanov Y, *et al*. Primary health care for the 21st century, universal health coverage, and the sustainable development goals. *The Lancet* 2018;392:1371–2.
- 12. Mills A. Mass campaigns versus general health services: what have we learnt in 40 years about vertical versus horizontal approaches? Bull World Health Organ 2005;83:315–6.
- GOV.UK. Delivery of priority health services: searching for synergies within the vertical versus horizontal debate [Internet]. Available: https://www.gov.uk/dfid-research-outputs/delivery-of-priorityhealth-services-searching-for-synergies-within-the-vertical-versushorizontal-debate [Accessed 31 Mar 2019].
- 14 Sweeney S, Obure CD, Maier CB, et al. Costs and efficiency of integrating HIV/AIDS services with other health services: a systematic review of evidence and experience. Sex Transm Infect 2012;88:85–99.
- 15 Summers LH, Pritchett LH. The structural-adjustment debate. Am Econ Rev 1993;83:383–9.
- 16 Scott V, Crawford-Browne S, Sanders D. Critiquing the response to the Ebola epidemic through a primary health care approach. *BMC Public Health* 2016;16:410.
- 17 Sumriddetchkajorn K, Shimazaki K, Ono T, et al. Universal health coverage and primary care, Thailand. *Bull World Health Organ* 2019;97:415–22.
- 18 Varatharajan D, Thankappan R, Jayapalan S. Assessing the performance of primary health centres under decentralized government in Kerala, India. *Health Policy Plan* 2004;19:41–51.
- 19 Quirke V, Gaudillière J-P. The era of biomedicine: science, medicine, and public health in Britain and France after the second World War. *Med Hist* 2008;52:441–52.
- 20 Watts N, Adger WN, Agnolucci P, *et al*. Health and climate change: policy responses to protect public health. *Lancet* 2015;386:1861–914.
- 21 Kickbusch I, Allen L, Franz C. The commercial determinants of health. *Lancet Glob Health* 2016;4:e895–6.
- 22 Hone T, Macinko J, Millett C. Revisiting Alma-Ata: what is the role of primary health care in achieving the sustainable development goals? *Lancet* 2018;392:1461–72.
- 23 Rasanathan K, Montesinos EV, Matheson D, et al. Primary health care and the social determinants of health: essential and complementary approaches for reducing inequities in health. J Epidemiol Community Health 2011;65:656–60.
- 24 Lange S, Vollmer S. The effect of economic development on population health: a review of the empirical evidence. *Br Med Bull* 2017;121:47–60.
- 25 Dieleman JL, Campbell M, Chapin A, et al. Future and potential spending on health 2015–40: development assistance for health, and government, prepaid private, and out-of-pocket health spending in 184 countries. *The Lancet* 2017;389:2005–30.
- 26 Bhaumik S. Health and beyond.... strategies for a better India: concept paper on primary health care in India. *J Family Med Prim Care* 2014;3.
- 27 Daniel H, Sulmasy LS. Policy recommendations to guide the use of telemedicine in primary care settings: an American College of physicians position paper. *Ann Intern Med* 2015;163:787.
- 28 Technical Series on Primary Health Care. Digital technologies: shaping the future of primary health care. World Health Organization, 2018.
- 29 The Lancet. Health care in conflict: war still has rules. *Lancet* 2018;391:P2080.
- 30 Atallah DG, Djalali A, Fredricks K, et al. Developing equitable primary health care in conflict-affected settings: expert perspectives from the Frontlines. Qual Health Res 2018;28:98–111.

### <u>d</u>

### **BMJ Global Health**

- 31 Taleb ZB, Bahelah R, Fouad FM, et al. Syria: health in a country undergoing tragic transition. Int J Public Health 2015;60:63–72.
- 32 SDG Indicators [Internet]. Available: https://unstats.un.org/sdgs/ indicators/database/ [Accessed 2 Feb 2019].
- 33 Universal health coverage (UHC) [Internet]. Available: https://www. who.int/news-room/fact-sheets/detail/universal-health-coverage-( uhc) [Accessed 9 Apr 2019].
- 34 Dieleman J, Campbell M, Chapin A, et al. Evolution and patterns of global health financing 1995–2014: development assistance for health, and government, prepaid private, and out-of-pocket health spending in 184 countries. *Lancet* 2017;389:1981–2004.
- 35 Cometto G, Witter S. Tackling health workforce challenges to universal health coverage: setting targets and measuring progress. Bull World Health Organ 2013;91:881–5.
- 36 WHO. Density of physicians (total number per 1000 population, latest available year) [Internet]. Available: https://www.who.int/gho/ health\_workforce/physicians\_density/en/ [Accessed 7 Apr 2019].
- 37 WHO. Final report of the expert group to the High-Level Commission on Health Employment and Economic [Internet]. Available: https:// www.who.int/hrh/com-heeg/reports/report-expert-group/en/ [Accessed 24 Jul 2019].
- 38 Anyangwe SCE, Mtonga C. Inequities in the global health workforce: the greatest impediment to health in sub-Saharan Africa. Int J Environ Res Public Health 2007;4:93–100.
- 39 Crisp N, Iro E. Putting nursing and midwifery at the heart of the Alma-Ata vision. Lancet 2018;392:1377–9. 20.
- 40 Tulenko K, Møgedal S, Afzal MM, *et al.* Community health workers for universal health-care coverage: from fragmentation to synergy. *Bull World Health Organ* 2013;91:847–52.
- 41 Vuori H. General practitioners: allies or enemies of primary health care. *Scand J Prim Health Care* 1984;2:57–61.
- 42 Bath J, Wakerman J. Impact of community participation in primary health care: what is the evidence? Aust J Prim Health 2015;21:2–8.
- 43 McEvoy R, Tierney E, MacFarlane A. 'Participation is integral': understanding the levers and barriers to the implementation of community participation in primary health care: a qualitative study using normalisation process theory. *BMC Health Serv Res* 2019;19:515.
- 44 Rifkin SB. Examining the links between community participation and health outcomes: a review of the literature. *Health Policy Plan* 2014;29:ii98–106.
- 45 Freeman T, Baum FE, Jolley GM, et al. Service providers' views of community participation at six Australian primary health care services: scope for empowerment and challenges to implementation. Int J Health Plann Manage 2016;31:E1–21.
- 46 Ved R, Sheikh K, George AS, et al. Village health sanitation and nutrition committees: reflections on strengthening community health governance at scale in India. BMJ Glob Health 2018;3:e000681.
- 47 Pederson A, Greaves L, Poole N. Gender-transformative health promotion for women: a framework for action. *Health Promot Int* 2015;30:140–50.
- 48 Hawkes S, Buse K. Gender and global health: evidence, policy, and inconvenient truths. *Lancet* 2013;381:1783–7.
- 49 Cerceau S. Gender equality in access to health care: the role of social health protection. A case study on India's national health insurance RSBY. Bonn, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH [Internet]. Available: https://www.giz. de/fachexpertise/downloads/giz2012-en-gender-equality-in-accessto-health-care.pdf
- 50 Langer A, Meleis A, Knaul FM, et al. Women and health: the key for sustainable development. Lancet 2015;386:1165–210.
- 51 Newman C. Time to address gender discrimination and inequality in the health workforce. *Hum Resour Health* 2014;12:25.

- 52 Wenham C, Katz R, Birungi C, et al. Global health security and universal health coverage: from a marriage of convenience to a strategic, effective partnership. *BMJ Global Health* 2019;4:e001145.
- 53 Organization WH. Primary health care and health emergencies, 2018. Available: https://apps.who.int/iris/handle/10665/328105 [Accessed 30 Sep 2019].
- 54 Waters H, Garrett B, Burnham G. Rehabilitating Health Systems in Post-Conflict Situations. In: Addison T, Brück T, eds. *Making Peace Work [Internet*. London: Palgrave Macmillan UK, 2009: 200–27. (cited 2019 Sep 30).
- 55 PHCPI. Indicator Library [Internet], 2015. Available: https:// improvingphc.org/content/indicator-library [Accessed cited 2019 Oct 1].
- 56 Primary Care Evaluation Tool (PCET) [Internet], 2017. Available: http://www.euro.who.int/en/health-topics/Health-systems/primaryhealth-care/publications/2010/primary-care-evaluation-tool-pcet [Accessed 1 Oct 2019].
- 57 Stenberg K, Hanssen O, Bertram M, *et al.* Guide posts for investment in primary health care and projected resource needs in 67 low-income and middle-income countries: a modelling study. *Lancet Glob Health* 2019;7:e1500–10.
- 58 Mash B, Ray S, Essuman A, et al. Community-Orientated primary care: a scoping review of different models, and their effectiveness and feasibility in sub-Saharan Africa. *BMJ Glob Health* 2019;4:e001489.
- 59 Angell B, Dodd R, Palagyi A, et al. Primary health care financing interventions: a systematic review and stakeholder-driven research agenda for the Asia-Pacific region. *BMJ Glob Health* 2019;4:e001481.
- 60 Gupta V, Katz R, Swaminathan S. Reimagining development assistance for health. N Engl J Med 2018;379:1891–3.
- 61 Glandon D, Meghani A, Jessani N, et al. Identifying health policy and systems research priorities on multisectoral collaboration for health in low-income and middle-income countries. *BMJ Glob Health* 2018;3:e000970.
- 62 Frenk J, Chen L, Bhutta ZA, *et al*. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet* 2010;376:1923–58.
- 63 Campbell J, Buchan J, Cometto G, et al. Human resources for health and universal health coverage: fostering equity and effective coverage. *Bull World Health Organ* 2013;91:853–63.
- 64 ReliefWeb. Expanding the Roles of Nurses in Primary Health Care - World [Internet]. Available: https://reliefweb.int/report/world/ expanding-roles-nurses-primary-health-care [Accessed 1 Oct 2019].
- 65 Perry HB, Zulliger R, Rogers MM. Community health workers in low-, middle-, and high-income countries: an overview of their history, recent evolution, and current effectiveness. *Annu Rev Public Health* 2014;35:399–421.
- 66 Woldie M, Feyissa GT, Admasu B, *et al.* Community health volunteers could help improve access to and use of essential health services by communities in LMICs: an umbrella review. *Health Policy Plan* 2018;33:1128–43.
- 67 Rouleau K, Bourget M, Chege P, et al. Strengthening primary care through family medicine around the world collaborating toward promising practices. *Fam Med* 2018;50:426–36.
- 68 Nutbeam D, McGill B, Premkumar P. Improving health literacy in community populations: a review of progress. *Health Promot Int* 2018;33:901–11.
- 69 Marston C, Hinton R, Kean S, et al. Community participation for transformative action on women's, children's and adolescents' health. Bull World Health Organ 2016;94:376–82.