



POSITION PAPER

Unlocking the power of communities to achieve Universal Health Coverage in Africa

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Authors' contributions

RN conceptualised and wrote the first draft of the manuscript. GM, DM and RKW supported the literature review and critically revised the manuscript. All authors read and approved the final manuscript.

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Abstract

Africa is at a critical time undergoing demographic, epidemiological, political and socio-economic transitions and faced with repeated outbreaks of emerging and reemerging diseases. The continent also faces other broader challenges of climate change, environmental degradation and pollution testing the resilience of its health systems and hindering progress to achieve health for all. Five years into the journey towards Sustainable Development Goals (SDGs), the continent – similar to the rest of the world – has been gripped with the Corona virus disease pandemic that has caused significant morbidity and mortality as well as severely disrupted health systems and the underlying socioeconomic determinants of health. One of the most significant SDG targets is the achievement of Universal Health Coverage (UHC) where all people have access to quality health services they need without inflicting a financial hardship on them. However, progress towards this target has been slow on the continent and requires rethinking current approaches employed. We argue that Africa's key strength lies in the communities whose potential should be unlocked to build cost effective and sustainable bottom-up health systems founded on Primary Health Care (PHC). Such systems should be founded on community-based services, designed around individuals, families and the community, involving community health workers and other actors, and capitalising on health promotion and disease prevention approaches. A strong community health system should be adequately linked to district, regional and national levels working together to empower and serve populations to make health for all a reality.

Keywords: community health, disease prevention, health for all, health promotion, primary health care

Introduction

The central promise in the 2030 agenda for sustainable development is to leave no one behind as countries make progress to achieve the Sustainable Development Goals (SDGs) (1). Although all goals contribute to health, SDG 3 specifically aims to ensure healthy lives and promote well-being for all ages (2). Among the goal targets, target 3.8 purposes to achieve Universal Health Coverage (UHC) for all (2). UHC seeks to ensure that all people have access to health services they need of sufficient quality from prevention, promotion, treatment, rehabilitation and palliative care with the use of such services not inflicting a financial hardship on them (3). UHC has great potential to drive achievement of SDG 3 and the 2030 agenda (2, 3). Based on Africa's unique context and needs, a health system rooted and operationalised within the community holds the promise to achieving UHC for its population.

The context: a continent undergoing change and prone to emergencies

The Corona virus disease that originated from China in the late 2019 (4-6) has further put a spotlight on the strain of health services delivery and tested the resilience of health systems across African countries. As of 19th January 2021, the continent had registered 3,284,451 COVID-19 cases, 3.5% of all cases globally, and 79,633 deaths (CFR: 2.4%) in Africa Union's 55 member states (7). Never in the world has the importance of strengthened, resilient and responsive health systems and UHC been more important (8-11). Moreover, Africa has a high prevalence of infectious diseases including malaria, HIV, tuberculosis among others (12, 13) and is prone to epidemics of emerging and re-emerging diseases including of Ebola, Mar-

burg, yellow fever and cholera (14, 15). Indeed, the continent was in 2014 gripped with its deadliest Ebola disease outbreak that greatly affected West Africa (Guinea, Sierra Leone and Liberia) leading to 28,616 cases and 11,310 deaths (16). Some parts of East Africa including the Democratic Republic of Congo (DRC) and Uganda have also suffered repeated outbreaks of haemorrhagic fevers especially Ebola and Marburg (14, 17). These conditions pose threats to health security on the continent and their emergence back rolls progress made in improving health outcomes. For example, the early interventions due to COVID-19 were associated with negative impacts on malaria, HIV, maternal mortality, sexual and reproductive health. The African continent is undergoing several transitions in its demography, disease epidemiology, political and socio-economic context (18). The continent is experiencing a surge in its young population and with increasing life expectancy, the elderly are also increasing. Between 1990 to 2019, the continent has seen the greatest burden of disease shift from communicable, maternal and neonatal conditions to non-communicable diseases and injury. Conflict, political processes and competing interests across African countries and its institutions continue to impact health in terms of funding and prioritisation, increase vulnerable groups and further health inequities. These political determinants of health further impact the socio-economic context including the poor living conditions, education, unemployment, unplanned urbanisation and inadequate access to healthy foods among others which further impact health outcomes. Moreover, the COVID-19 pandemic has further negatively impacted these socio-determinants of health reversing gains in education, employment and poverty across the continent. Another challenge that the continent faces is environmental with environmental

degradation, pollution, and climate change increasing risk of natural disasters such as drought, flooding, and landslides, food insecurity and vulnerability to infectious diseases (19). These challenges continue to negatively impact the health of Africans, its health systems, populations, economy, and progress towards UHC.

Health systems in Africa

Although Africa has a fair share of health and environmental challenges, access to health services in most parts of the continent occurs amidst several impediments including fragile, weak and inadequately funded health systems (20, 21). A health system comprises all organizations, institutions and resources that produce actions whose primary purpose is to improve health (22). The World Health Organization proposed six building blocks of a health system (23): service delivery; health workforce; health information systems; access to essential medicines; financing; and leadership/governance and deficiencies among these have been shown in Africa for several years. Service delivery on the continent is characterised by challenges including in health worker availability and capacity, and availability of required equipment and drugs (20, 21, 24). The continent also has the least health workforce per capita (24-26). For example, in 2007, Africa had an average of 2.3 health workers of all categories per 1000 population compared to 18.9 in Europe and 24.8 for Americas (25). To meet the basic healthcare needs of its population, Africa requires at least one million more health workers (27, 28), however, the current growth rate of the workforce is not at par with recommended targets (29). In 2001, African Union countries pledged to allocate 15% of their annual budget to health to strengthen their health system and ensure disease preparedness and response, however, although most countries have increased the proportion of

public expenditure allocated to health, only a handful have met the Abuja target (30). Africa's per capita expenditure on health stood at \$160 in 2014 far lower than any other continent (30). Across the continent, there have been demonstrated gaps in health systems leadership and governance, health information systems and access to essential medicines (20, 21, 24). These gaps impact the quality of care provided and the resilience of the health system to respond to shocks and stresses hindering progress towards UHC.

The promise in community health

UHC aims to achieve universal access to strong, resilient and people-centred health systems founded on primary health care (PHC) (3). High quality health systems should be for the people, equitable, resilient and efficient, focussed on both preventing and treating disease and illness, and helping to improve well-being and quality of life (3, 21). Amidst the challenges that Africa faces, it is critical for the continent to generate innovative strategies to advance the health of its population to achieve UHC. One potential lies in unlocking the power of its communities as a basis for organising and structuring bottom-up health systems. Communities are a group of people with diverse characteristics linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings (31). A community health system is "the set of local actors, relationships, and processes engaged in producing, advocating for, and supporting health in communities and households outside of, but existing in relationship to, formal health structures" (32). An effective community health system should: be all inclusive for community members, involve various stakeholders, utilize community structures, and have a functional PHC system. African communities are characterised by a sense of culture, togetherness, harmony, and respect and

consist of community members – adolescents, young people, and elderly – leaders and community groups among others. Individuals, families and communities have the ability to promote and maintain health, prevent disease, and cope with illness and disability with or without the support of a health-care provider, a concept termed selfcare (33). Self-care interventions includes health promotion, disease prevention and control; self-medication; providing care to dependent persons; seeking hospital/specialist/primary care if necessary; and rehabilitation, including palliative care (34) and has had wider applicability in health. In sexual and reproductive health, self-care has been successful in improving antenatal, delivery, postpartum and new-born care and combating sexually transmitted infections, including HIV, reproductive tract infections, cervical cancer and other gynaecological morbidities (34). In management of chronic conditions, positive outcomes for chronic condition are registered when patients and families, community partners, and health care teams are informed, motivated, prepared and working together (35). Reviews have demonstrated the potential of community health programmes in improving health outcomes including for malaria, tuberculosis and maternal and child health indicators (36-40). Moreover, countries in Africa including Ethiopia, Malawi and Rwanda have showcased several benefits from scaling up their community health programmes (41). The key elements for successful community health programmes have been national stewardship, embeddedness and integration, cadre and role definition, human resource management and support, and financing (42).

The role of communities in health promotion and disease prevention

Most health problems in Africa stem from poor hygienic and living conditions, food in-

security and poor nutrition as well as emerging and re-emerging infectious agents expounded by poverty, lack of health information and poor health seeking behaviours (43, 44). The continent is also faced with a ‘triple burden of disease’ consisting of already existing communicable, emerging and re-emerging, and non-communicable diseases. In line with this, the Astana Declaration recognises the need for prioritizing health promotion and disease prevention so that people’s needs across the life course are met through comprehensive preventive, promotive, curative, rehabilitative services and palliative care (45). Unfortunately, far so often and in many African countries, the health system is focused on provision of curative services at the expense of health promotion and disease prevention which is not in sync with the continent’s disease burden. In 2010, it was noted that whereas in low-income countries, 70 to 80% of the disease burden was attributable to preventable infectious diseases, less than 10% of national expenditures were directed to public population services (46). The contributory factors are the limited funding available for health care leading to prioritisation of short term goals compared to long term objectives, traditional emphasis on direct medical services and development, and limited capacity for health promotion and disease prevention (46). Fineberg et al in discussing the dilemma of why prevention is often overlooked for treatment noted that it is often invisible, requires persistent behaviour change and its results may be delayed in addition to influence of commercial interests and other cultural or personal beliefs (47). To bridge the observed gaps in health promotion, the WHO regional office for Africa passed the health promotion strategy for the African region in 2012 whose aim is to “strengthen the capacity of Member States to develop, implement, monitor and evaluate health promotion strategies, policies, and regulatory

and legislative frameworks” (48). The risk factors and determinants of focus were communicable and non-communicable diseases, violence and injuries, maternal and child health conditions, and new and re-emerging threats to health” (48). Communities are key resources to take lead in health promotion and disease prevention initiatives and contribute to addressing these risk factors. The COVID-19 pandemic has been another reminder of how important individual and community actions are to maintenance of health and wellbeing. Indeed, individual and community behaviours such as handwashing, social distancing, avoiding spreader events, protecting the most vulnerable and community resilience, peer and social support and self-management have all been key determinants of disease response and its impact.

Primary health care as the foundation for Universal Health Coverage

PHC is one of the strong pillars of UHC which should be based on community-based services delivery and health promotion and disease prevention. The 1978 WHO Alma Ata declaration recognised health as a fundamental human right and noted the need for action by various sectors beyond health to achieve health for all (49). In the declaration, PHC was defined as “essential healthcare based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination” (49). Although PHC should be country and context specific, it should comprise key services for health improvement. These services include: health education on usual health problems and their prevention and control measures; an adequate supply of safe

water and basic sanitation; maternal and child care including family planning, immunisation against major infectious diseases; prevention and control of endemic diseases; treatment of common diseases and injuries; and provision of essential drugs (49). PHC recognises health as multisectoral bringing together other sectors such as agriculture, education, housing among others to contribute to health efforts (49). Furthermore, the need for individual and community participation in planning and organising PHC is paramount with emphasis on use of local resources and the system supported by trained and lay health workers including physicians, nurses, midwives, community health workers (CHWs) and traditional practitioners who respond to community needs (49). PHC should be sustained by integrated, functional, and mutually supportive referral systems. The need for the principles and values espoused in the Alma Ata declaration are now more important than ever and continue to be relevant especially in Africa which should strive to build health systems that capitalise on mid-level professionals and CHWs and recognise the relevance of social determinants of health. Owing to the continued relevance and importance of PHC 40 years later, the Astana declaration reaffirmed the need for PHC efforts to ensure that everyone is able to enjoy the highest possible attainable standard of health regardless of where they are (45). PHC involves the provision of a broad range of preventive and curative services to meet the needs of the population served and remains a cost-effective approach for many low- and middle-income countries (49). Building sustainable PHC driven by knowledge and capacity-building, human resources for health, technology and financing thus remains one of the proven approaches to achieve UHC (45). The strong platform of PHC should overarchingly be based on community-based services and health promotion and disease prevention

(3). This however should be contextualised to the current context acknowledging the major shifts in disease conditions and risk factors, technological advancement, and latest evidence.

Restructuring for universal health coverage: from bottom up

“Health is made at home, hospitals are for repairs” has been a common phrase in discussions to reform health systems. There is agreement on the importance of health promotion that starts with the individual, families and the community as a central point for building people-centred health systems. These should be equipped with health promotion and disease prevention information so that they are empowered and actively engaged in maintaining their health and not mere passive bystanders. To achieve UHC, health systems should reach all communities no matter the context. Recognised as the first point of contact with the health system in many communities, CHWs have an important role to play in community mobilisation, education, dialogue, empowerment and basic health services provision (50). CHWs have so far contributed to several health gains in immunisation, maternal and child health and sexual and reproductive health services provision across several countries (38, 51). The WHO has provided guidance to optimize CHW programmes stipulating ways to improve the design, implementation, performance and evaluation of programmes to contribute to the progressive realisation of UHC (52). These guidelines cover several areas of CHW programmes including training, supervision, remuneration and career progression among others aimed to bridge persistent gaps across programmes (52). These guidelines should inform the scale-up and sustainability of well designed, responsive and impactful CHW programmes. Within communities, community action and outcomes go beyond

the CHW as the most visible cadre with a notable contribution of wider community actors and health system factors and thus the need to embrace community health systems (32, 53). CHWs are part of the community health system which in itself is an integral part of PHC and district health systems (53). The other actors at the community level such as local political, religious and cultural leaders, health committees, community groups and faith-based organisations all have important roles to play in advancing community health (32, 54). These actors work without formal bureaucracies relying on trust, acceptability and support of the formal health system influenced by local histories, economic and political systems, and social–cultural norms (32). PHC systems support community health with well-trained health workers, drugs, equipment, health information systems, and proper referral systems and should be well financed and governed. With more investment in health promotion and disease prevention at the community level, the disease burden on the PHC system is reduced providing room for health workers to improve their capacity to better support communities including through routine outreaches and screening activities reaching the underserved. The PHC system should then link with the district health system across the referral pathway to support management of complicated cases or their subsequent referral to the next level (53). The functionality and integration of the health system is paramount right from the CHWs, community health systems, PHC and the overall district health system. This integration should include aspects of joint ownership and design, collaborative supervision and feedback, incentives, and monitoring systems incorporating data from communities and the health system (54). The district health system should then link with the regional / provincial and national health sys-

tems providing clear pathways for referral and integration.

Conclusions

To make health for all a reality in Africa, there is need for individuals, families and communities to take charge of their own health. These should be supported by a robust community health and primary health care system providing quality, people-centred care with adequate linkage to the district and national health systems. These measures should accelerate the progress towards achieving the SDGs.

References

1. General Assembly. United Nations: Transforming our world: The 2030 agenda for sustainable development 2015 [Available from: <https://sdgs.un.org/2030agenda>.
2. United Nations Development Programme. What are the Sustainable Development Goals? 2015 [Available from: <https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>.
3. World Health Organization. Universal health coverage 2021 [Available from: https://www.who.int/health-topics/universal-health-coverage#tab=tab_1.
4. Cucinotta D, Vanelli M. WHO Declares COVID-19 a Pandemic. *Acta Biomed.* 2020;91(1):157-60.
5. Sohrabi C, Alsafi Z, O'Neill N, Khan M, Kerwan A, Al-Jabir A, et al. World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery.* 2020.
6. World Health Organization. COVID-19 situation update for the WHO African region 29 July 2020. 2020.
7. Africa CDC. Outbreak Brief #53: Coronavirus Disease 2019 (COVID-19) Pandemic. Africa Centres for Disease Control and Prevention; 2021.
8. Lal A, Erundu NA, Heymann DL, Gitahi G, Yates R. Fragmented health systems in COVID-19: rectifying the misalignment between global health security and universal health coverage. *The Lancet.* 2020.
9. Armocida B, Formenti B, Palestra F, Ussai S, Missoni E. COVID-19: Universal health coverage now more than ever. *Journal of global health.* 2020;10(1).
10. Akinleye FE, Akinbolaji GR, Olasupo JO. Towards universal health coverage: lessons learnt from the COVID-19 pandemic in Africa. *Pan Afr Med J.* 2020;35(Suppl 2):128-.
11. Tediosi F, Lönnroth K, Pablos-Méndez A, Raviglione M. Build back stronger universal health coverage systems after the COVID-19 pandemic: the need for better governance and linkage with universal social protection. *BMJ Global Health.* 2020;5(10):e004020.
12. Frank TD, Carter A, Jahagirdar D, Biehl MH, Douwes-Schultz D, Larson SL, et al. Global, regional, and national incidence, prevalence, and mortality of HIV, 1980–2017, and forecasts to 2030, for 195 countries and territories: a systematic analysis for the Global Burden of Diseases, Injuries, and Risk Factors Study 2017. *The lancet HIV.* 2019;6(12):e831-e59.

13. World Health Organization. Global tuberculosis report 2013: World Health Organization; 2013.
14. Muyembe-Tamfum J-J, Mulangu S, Masumu J, Kayembe J, Kemp A, Paweska JT. Ebola virus outbreaks in Africa: past and present. *Onderstepoort Journal of Veterinary Research*. 2012;79(2):06-13.
15. Mengel MA, Delrieu I, Heyerdahl L, Gessner BD. Cholera outbreaks in Africa. *Cholera outbreaks*: Springer; 2014. p. 117-44.
16. Centres for Disease Control and Prevention. 2014-2016 Ebola Outbreak in West Africa 2019 [Available from: <https://www.cdc.gov/vhf/ebola/history/2014-2016-outbreak/index.html>].
17. Changula K, Kajihara M, Mweene AS, Takada A. Ebola and Marburg virus diseases in Africa: Increased risk of outbreaks in previously unaffected areas? *Microbiology and Immunology*. 2014;58(9):483-91.
18. Defo BK. Demographic, epidemiological, and health transitions: are they relevant to population health patterns in Africa? *Global health action*. 2014;7(1):22443.
19. Labbe J, Ford JD, Berrang-Ford L, Donnelly B, Lwasa S, Namanya DB, et al. Vulnerability to the health effects of climate variability in rural southwestern Uganda. *Mitigation and Adaptation Strategies for Global Change*. 2016;21(6):931-53.
20. Oleribe OO, Momoh J, Uzochukwu BS, Mbofana F, Adebisi A, Barbera T, et al. Identifying key challenges facing healthcare systems in Africa and potential solutions. *International journal of general medicine*. 2019;12:395.
21. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet global health*. 2018;6(11):e1196-e252.
22. Organization WH. The world health report 2000: health systems: improving performance: World Health Organization; 2000.
23. World Health Organization. Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action. Production. 2007:1-56.
24. Kirigia JM, Barry SP. Health challenges in Africa and the way forward. *Int Arch Med*. 2008;1(1):27-.
25. Anyangwe SCE, Mtonga C. Inequities in the Global Health Workforce: The Greatest Impediment to Health in Sub-Saharan Africa. *International Journal of Environmental Research and Public Health*. 2007;4(2):93-100.
26. Willcox ML, Peersman W, Daou P, Diakité C, Bajunirwe F, Mubangizi V, et al. Human resources for primary health care in sub-Saharan Africa: progress or stagnation? *Human Resources for Health*. 2015;13(1):76.
27. Chen L, Evans T, Anand S, Boufford JI, Brown H, Chowdhury M, et al. Human resources for health: overcoming the crisis. *The Lancet*. 2004;364(9449):1984-90.
28. Singh P, Sullivan S. One million community health workers: technical task force report. New York: Earth Institute at Columbia University. 2011:304-10.

29. Kinfu Y, Dal Poz MR, Mercer H, Evans DB. The health worker shortage in Africa: are enough physicians and nurses being trained? : SciELO Public Health; 2009.
30. World Health Organization. Public financing for health in Africa: from Abuja to the SDGs. World Health Organization; 2016.
31. MacQueen KM, McLellan E, Metzger DS, Kegeles S, Strauss RP, Scotti R, et al. What is community? An evidence-based definition for participatory public health. *Am J Public Health*. 2001;91(12):1929-38.
32. Schneider H, Lehmann U. From community health workers to community health systems: time to widen the horizon? *Health Systems & Reform*. 2016;2(2):112-8.
33. World Health Organization. Self care for health: a handbook for community health workers & volunteers. New Delhi: World Health Organization, Regional Office for South-East Asia. 2013.
34. World Health Organization. WHO consolidated guideline on self-care interventions for health: sexual and reproductive health and rights. . Geneva: World Health Organization; 2019 2019.
35. Organization WH. Innovative care for chronic conditions: building blocks for actions: global report: World Health Organization; 2002.
36. Haines A, Sanders D, Lehmann U, Rowe AK, Lawn JE, Jan S, et al. Achieving child survival goals: potential contribution of community health workers. *The lancet*. 2007;369(9579):2121-31.
37. Lehman U, Sanders D. Community health workers: What do we know about them? The state of the evidence on programmes, activities, costs and impact on health outcomes of using community health workers. World Health Organization: Evidence and Information for Policy, Department of Human Health Geneva. 2007.
38. Lewin SA, Dick J, Pond P, Zwarenstein M, Aja G, van Wyk B, et al. Lay health workers in primary and community health care. *Cochrane Database Syst Rev*. 2005(1):Cd004015.
39. Vaughan K, Kok MC, Witter S, Dieleman M. Costs and cost-effectiveness of community health workers: evidence from a literature review. *Human resources for health*. 2015;13(1):1-16.
40. Christopher JB, Le May A, Lewin S, Ross DA. Thirty years after Alma-Ata: a systematic review of the impact of community health workers delivering curative interventions against malaria, pneumonia and diarrhoea on child mortality and morbidity in sub-Saharan Africa. *Human resources for health*. 2011;9(1):1-11.
41. USAID A. Three successful Sub-Saharan Africa family planning programs: lessons for meeting the MDGs. Washington DC: USAID. 2012.
42. World Health Organization. Community Health Worker Programmes in the WHO African Region: Evidence and Options — Policy brief. Geneva. World Health Organization; 2017.
43. Fuente D, Allaire M, Jeuland M, Whittington D. Forecasts of mortality and economic losses from poor water and sanitation in sub-

- Saharan Africa. PLOS ONE. 2020;15(3):e0227611.
44. Fenollar F, Mediannikov O. Emerging infectious diseases in Africa in the 21st century. *New Microbes New Infect.* 2018;26:S10-S8.
45. World Health Organization, The United Nations Children's Fund (UNICEF). Global Conference on Primary Health Care From Alma-Ata towards universal health coverage and the Sustainable Development Goals. World Health Organization and The United Nations Children's Fund (UNICEF); 2018.
46. Omaswa F, Boufford JI. Strong ministries for strong health systems. An Overview of the Study Report: Supporting Ministerial Health Leadership: A Strategy for Health Systems Strengthening New York: The African Center for Global Health and Social Transformation (ACHEST) and The New York Academy of Medicine (NYAM). 2010.
47. Fineberg HV. The paradox of disease prevention: celebrated in principle, resisted in practice. *Jama.* 2013;310(1):85-90.
48. World Health Organization. Health Promotion: Strategy for the African Region. 2013.
49. World Health Organisation. Declaration of Alma-Ata: International Conference on Primary Health Care. WHO Alma-Ata; 1978.
50. Perry HB. Health for the people: National community health worker programs from Afghanistan to Zimbabwe. *Maternal and Child Survival Program*; 2020.
51. 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. *Annual review of public health.* 2014;35:399-421.
52. World Health Organization. WHO guideline on health policy and system support to optimize community health worker programmes: World Health Organization; 2018.
53. Sacks E, Morrow M, Story WT, Shelley KD, Shanklin D, Rahimtoola M, et al. Beyond the building blocks: integrating community roles into health systems frameworks to achieve health for all. *BMJ global health.* 2019;3(Suppl 3):e001384.
54. Naimoli JF, Perry HB, Townsend JW, Frymus DE, McCaffery JA. Strategic partnering to improve community health worker programming and performance: features of a community-health system integrated approach. *Human resources for health.* 2015;13(1):1-13.