African Primary Health Care as complex adaptive system

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Abstract

African Primary Health Care (PHC) is beset by bureaucracy influenced by neocolonialism, fragmented donor funding and poorly supervised task-shifting despite subscribing to the lofty ideals of the Alma Ata Declaration of 1978. Despite a more empowered conversation since the formation of the African Union in 2001 there is still a lack of clarity in the operationalization of African PHC, as expressed in the World Health Report of 2008 and the Astana Declaration of 2018. The 2021 Report of the Commission of the Africa Health Agenda International Conference recommends integrated care models of service delivery, contracting, and reimbursement and strengthening PHC delivery with flexible non-hierarchical multidisciplinary teams of clinical and non-clinical staff to provide integrated care to defined empanelled populations.

The how is best addressed with complex adaptive systems, where decentralized PHC teams empaneled to defined populations, produce the right outcomes given the right purpose, boundaries, and vortices. Human resource shortages are a critical challenge in Africa, but instead of narrow task-shifting without supervisory support the African Forum for PHC advocates that PHC teamwork should involve all healthcare workers in PHC teams with appropriate skill mixes. African experience shows that PHC teamwork can be built in layers starting with the basic unit of community health workers, nurses, clinical officers, and doctor for as small a defined population (±10000-30000), in ratios appropriate to each country's human resources (both public and private). Bureaucrats should embrace complexity theory and the ability of empowered PHC teams to deliver on African Agenda 2063.

Introduction

Whilst the Alma Ata Declaration on Primary Health Care (PHC)[1] remains a seminal statement the conversation globally remains the challenges of implementation with the fragmenting effect of selective PHC driven by aid-funding priorities, poor PHC funding and social solidarity, and the growing power of hospitals / specialisms.[2] The global discourse shifted with the World Health Report 2008 on PHC. This placed PHC within universal health coverage (UHC) efforts, urging governments to adopt a stewardship role to the whole health system (including the private sector), reorganizing health service delivery around people's

needs and integrating public health with primary care.[3] The Astana Declaration echoed this in 2018, with operational levers emphasizing models of care that integrate primary care and public health functions and engagement with private sector providers in new purchasing and payment systems.[4]

African Primary Health Care

African PHC has a long history but the Alma Ata Declaration is prominent. The legacy of colonialism and neo-colonialism have confounded efforts at reforms. Old style bureaucratic government systems prevail amidst political instability. Donor 'aid' agencies have pushed African governments into parallel fragmenting systems to deliver on self-serving narrow disease-based outcomes. A continent regarded as a basket case has just been a meek taker of the titbits from the global health spend, making global social solidarity an empty phrase.[5]

Since the formation of the African Union in 2001 the conversation has become more empowered, with the Abuja Declaration of spending 15% of government expenditure on health by 2015.[6] Although progress has been poor the first clear statement on PHC in Africa emerged in 2006 Report of World Health Organizaton Regional Office for Africa (WHO AFRO) and the Ouagadougou Declaration in 2008.[7,8] These spelt out the inadequate attention to PHC with weak structures and poor resource allocations. These documents called for decentralized structures as district health systems to be created in a bottom-up approach across Africa to support a comprehensive, continuous, integrated, community-based PHC system including the private sector. However, verticalized programmes were still seen as entry point to effect this, reflecting the weak capacity of government.

It was only in 2017 that WHO AFRO urged a holistic approach to strengthening health systems, moving away from the programme-specific approach of the Millennium Development Goal (MDG) era.[9] The 2018 African contributions to the WHO Global Report spoke of the challenge of PHC implementation being poor decentralisatiom in which not only technical, political and administrative capacity at the lower level does not match the level of authority transferred but financial and human resource management is not completely handed over to the lower levels.[10] A pamphlet on UHC in the African Region in 2017 states that there needs to be a shift in emphasis: from a disease-centred approach to a person-centred approach that provides all interventions (from promotive to palliative care), across all ages, focusing on all health risks and marginalized groups.[11] Unfortunately, the how is not clear.

African Primary Health Care embracing complexity theory

Human resource shortages are quoted as a critical challenge but this challenge in Africa is compounded by narrow task-shifting without the supervisory support and appropriate - transdisciplinary teamwork that contains an efficient skills mix, trained for African PHC in the decentralized context of African PHC. The PHC performance Initiative Conceptual Framework speaks of empanelment (as a strategy for population health management) and team-based care organization (as a strategy for facility organization and management) that together with provider availability, competence and motivation can produce high-quality first contact accessibility, continuity, comprehensiveness, coordination and person-

centredness in PHC.[12] The AHAIC Commission Report in 2021 urges PHC as a priority in UHC attempts and recommends implementing integrated care models of service delivery, contracting, and reimbursement and strengthening PHC delivery with flexible non-hierarchical multidisciplinary teams of clinical and non-clinical staff to provide integrated care to defined empanelled populations.[5]

Complexity is a way of thinking in which system structures are interconnected with non-linear multi-directional interactions that the system evolves with. An organization functioning well as a complex adaptive system has clear purpose, values and simple operating principles that acts a vortex for driving the organization in the right direction.[13] A big challenge in integration is integration for what purpose. Many managers integrate to suit themselves in a top-down approach rather than centering it around the patient in what has to be a bottom-up approach. If person-centredness is the core value of PHC then a quality interaction between the healthcare provider and the person is the purpose. Health systems in Africa need to engender greater respect and greater responsibility for patient-facing health workers. Policymakers need move away from top-down reductionist micro-managing public policy approaches and support patient-facing health workers with the space to organize in units of population care from the bottom-up as a complex adaptive system for the best results, using their training effectively and enhancing their training to be more effective.

The African Forum for Primary Health Care (AfroPHC) consists of diverse multidisciplinary PHC workforce stakeholders from across Africa advocating for PHC and UHC. With members from 40 countries across Africa, including the diversity of PHC workforce, the conversation has been robust and far-reaching. Its vision is "*African PHC service delivery under Universal Health Coverage (UHC) should be comprehensive, accessible, high quality, responsive to local needs, in partnership with communities and delivered by strong teamwork, training and supportive supervision"* Teamwork should involve all healthcare workers, but should be in layers starting with the basic unit of community health workers, nurses, clinical officers and doctor for as small a defined population (±10000-30000), in ratios appropriate to each countries human resources (both public and private). Whist the district health system is important to strengthen as a local PHC coordinating mechanism, governments need to act as steward of all health (public and private), pooling and enhancing tax-financed national funds into a fund that can contract in mixed capitation systems with more decentralized empowered units of healthcare workers (public and private) caring for smaller populations. AfroPHC embraces the bio-pyscho-social-spiritual concepts of family medicine in managing the person interaction, with services being comprehensive (as defined by the team composition and available resources of medicines and investigations), the locus of control in communities and multisectoral collaboration as a strategy to create a truly healthy community.[14] Chiawelo Community Practice is an example.[15] Policy proposals for UHC contracting for PHC show that healthcare workers can be agents of change with a few principled operational vortices set out by policy-makers driving appropriate and responsive PHC.[16] Some governments in Africa are already embracing this approach e.g., Rwanda, Kenya, Sierra Leone.[17] However, the bureaucracy resists in many others.

Conclusion

Bureaucratic African governments need to trust their health workers and populations on the way to the Africa Agenda 2063.[18] Small defined populations cared for by a team with an appropriate mix of healthcare workers (from public and private sectors) and delivered in a comprehensive, continuous, coordinated manner can be the complex adaptive system to deliver better PHC and health for all in Africa.

Keywords: complex adaptive systems, complexity theory, primary health care, family medicine, district health systems, Africa

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