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Tackling the social determinants of the health system of a low- and middle-income country: Improving health service delivery in an African setting

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Abstract
Background: Most African Nations are marred with failing health systems factored by the lack of financing, technology, resources and even the political will to develop and maintain them. But even worse are some social determinants that are immensely contributing to the gradual collapse of these health systems. These social determinants are factors within the control of the health system and so, should be religiously improved to maximise the effectiveness of services even in the face of lack and limitations. A case study from an African community is referenced and different issues concerning a failing health system have been identified. These issues are mostly of social nature.
Main Body: How social issues strongly affect health systems and especially those from African settings were discussed. Therefore, this Review aims at identifying these social determinants and providing solutions to improving them by demonstrating the need for patient satisfaction, health workforce satisfaction and an effective leadership in the health system. These issues are categorized according to the WHO building blocks after which the 'Service Delivery' component is selected to be discussed. Issues from the referenced context that contribute to a failed health service delivery include, the overuse of free public health services, staff shortage, crowding, immense workload, patient dissatisfaction, expensive private sector and organisational conflicts. These social issues are typical factors affecting most African health systems.
Conclusion: The strategies to solving these issues are: attaining health professionals' satisfaction, attaining patients' satisfaction and developing an effective leadership. From these three strategies, recommendations are made to solving them. Some of these recommendations are: the improvement of health workers' salaries, creating a healthy work-life balance for staff, running an all-inclusive leadership system, the training of young medical doctors in health management and administration, the building of inter-professional relationships, an effective patient feedback mechanism, the pre-triage methodology to cushion workload, the use of technology, and most importantly is the heavy community participation in health and healthcare. These recommendations, if implemented will improve service delivery to optimal levels and in turn, positively affect the health system of the community.

Keywords: Universal health coverage, health service delivery, health system development, health workforce, WHO systems building blocks, health system in low- and middle-income country

Introduction

A case study involving two newspaper publications which published the failing health system of a community as compiled by Professor Di McIntyre and Professor Lucy Gilson [1] will be assessed. By using the WHO health systems building blocks [2], the problems discussed in both press releases will be identified accordingly. These problems will then be categorized based on these building blocks and evaluated to also identify their underlying causes. Service delivery, being a component of the building blocks will be discussed to evaluate the reasons why it failed in strengthening the universal health coverage of the community in question. This review will end in discussing practical strategies of curbing the problems analysed as solutions will be recommended.

Research Questions

1. What factors negatively affect health service delivery in most African settings?
2. What are the effective ways these factors may be improved?

Research Objectives

1. To identify and analyse the social determinants of health systems that directly affect service delivery in African settings.
2. To recommend, as searched from the international literature, strategies that will tackle these determinants so as to improve the service delivery and in extension, the health systems of these African settings.

Table 1: Highlights of the complaints on the poor health system

Patients	*Health Workers*
Uncaring and incompetent health workers	Patients abuse the free health services
Spend less time in clinical consultations	Increased workload
Only interested in making money	Health workers are not consulted before the change or introduction of

	a new policy
Disrespectful health workers	Unrealistic targets and expectations on health workers
Insensitive health workers to patients' culture	Reluctance and hesitance to consult the doctor until severe degrees of disease manifest
Ineffective communication between doctors and patients due to foreign doctors in practice and the use of fancy language by the local ones.	Exaggeration of patients' rights by the introduction of the 'patients' Rights Charter' which overshadows the rights of health professionals
Discrimination based on social class, profession (sex workers for examples)	No career progression, bonuses or other incentives
Breaking the rule of confidentiality	Not appreciated and supported by the general public
Unavailability of drugs	No inspection, monitoring and evaluation from district officers
Administration of ineffective drugs	Patients are disrespectful
	Abusive, aggressive and gender-discriminating clinical managers
	Very little pay

Categorization of problems

Fig 1: WHO building Blocks of Health Services

The main problem that is causing concern is the increase in the number of deaths, hence, increased mortality rate. This mortality rate is also related to other problems in the health system of this community, and they will be categorized according to the six WHO systems building blocks: service delivery; health workforce; Medical products, vaccines and Technology; information; leadership; and financing.

Problems of Service Delivery: Issues consist of the refusal to take in patients, the abuse of public services (especially maternal healthcare), increased workload of health workers, not visiting the hospital until illness is severe and an alternative private healthcare which is expensive.

Health Workforce Problems: the abuse of power, maltreatment, gender-based discrimination and partiality from managers to members of staff, professionally incompetent staff, corruption, personal factors such as cultural insensitivity, bad communication, discrimination, and disrespect to patient confidentiality. Another problem affecting the health workforce is the lack of appreciation, support and respect from the general public.

Problems of Information: The issues of policy makers not engaging the affected health workforce before policies are made is problematic as information which should have been used as a tool to foster better policies is ignored. Information is relayed through communication which is not only lacking between the policy makers and the health workers but also between the doctors and patients.

Problems of Medical Products, Vaccines & Technology: Problems such as the supply of ineffective drugs and unavailability of medications are responsible for this category.

Problems of Financing: All round problems from insufficient salary of workers to unavailability of medications could be factored by insufficient financing.

Leadership/Governance: The "lack of inclusion" approach in making policies and lack of supervisory activities of the district offices is a problem in this regard. The Managerial oppression of members of staff can also be categorized here.

Discussion

Common problems

From the 6 components, the service delivery category will be critically analysed on why these problems were not successful in achieving effective universal health coverage contextually in this case study.

Public Overuse: The overuse of medical services is associated with mortality [3]. Free access to healthcare may have consequences of the overuse of healthcare services as it occurred in Spain in the 2000s which made the policies sustaining the universal health coverage of the country eventually ineffective [4]. Causes of overuse of healthcare services may include, limited access to, or the neglect of primary healthcare, influencing the general public to opt for emergency care which provides immediate medical attention, even in non-working hours like weekends. Also, the poor awareness and education of the public contributes to the overuse of healthcare services [5].

Staff shortage: The shortage of staff puts health workers under immense pressure. Such pressures can lead to conditional and prejudiced servitude and physical and psychological exhaustion that may even lead to the vulnerability of the staff to the same diseases they treat, leading to debility, morbidity and mortality on both sides of patients and workers as in the case of SARS in Vietnam and China [6] and Covid-19 pandemic in Italy [7].

Crowding: This is the circumstance of high patient load that overstretches services rendered in a health facility thereby affecting access, coverage and quality of care to the public. Factors influencing crowding are: increased hospital occupancy due to bed shortage; increased patient acuity-in this case, the type of patients been treated may change overtime by age, sex, disease incidence etc. For instance, the median age of the UK population between 1990 and 2004 increased by 10 years. Some disease types or age groups may also increase with this changing patient populations thereby increasing co-morbidities that will prolong consultation and waiting time [8]. Other factors include wrongly or inappropriately referred patients which could be self-referral in this context. In the USA for instance, 80-90% of diagnosis and treatment protocols start with the patients themselves, void of professional assistance, leading to the bypassing of General Practice or Family Medicine Practitioners to go to the Emergency Department [9]. Another factor that influences crowding is delayed ancillary services such as radiology, lab reports and even administrative protocols [9].

Immense Workload: Laetitia Rispel and colleagues [10] showed how high workload can frustrate service delivery and subsequently make universal health coverage ineffective. Factors such as, poor human resource planning for Health (HRH) in all facets of the health system, ineffective or no centralized and integrated information systems, inequities in dichotomies such as urban versus rural, and public facilities versus private ones; ineffective governance, gaps in fragmentation, poor coordination, failure in operational management both in facilities management and in the district departments and finally, suboptimal health science education contribute to increase workload.

Patient dissatisfaction: Patient satisfaction is both a determinant and a desired outcome of an effective healthcare service delivery which in turn improves access and coverage. Service satisfaction enhances the patients' quality of life [11] through the facilitation of proper diagnosis by health workers and the implementation of appropriate solution-based actions. Therefore, factors that will influence patient dissatisfaction include, low reliability of the healthcare provider as perceived by the patients, the lack of providing the sense of assurance by healthcare workers through knowledge, skill and courtesy, a generally poor appearance of healthcare facilities, personnel and equipment, poor communication, lack of empathy, sensitivity to healthcare costs and the unavailability of the healthcare workforce [12]. Dissatisfied patients also complain about medical services, refuse follow-up care, exhibit word-of-mouth negative comments against the healthcare workers, discourage others from accessing healthcare services and hesitate to access health services until severe disease progression [12].

Private Sector: High cost that characterises the private sector significantly reduces access and coverage of service delivery and affects equity of service delivery just as in China in the 2,000s [13]. In the UK, private care users have more advantages in terms of quick medical care service delivery, more convenient treatment hours and easier booking of appointments than public care users [14], thereby increasing the gap in inequity. Health cases such as mental health and the rehabilitation of drug and alcohol abusers are very expensive to treat. The involvement of the private sector will significantly reduce access and coverage of healthcare delivery [14].

Organizational Conflicts: Organization conflicts, especially in the health sector can cause serious service delivery crisis and operational collapse just like in the 1990s in Iran [15].

Strategies and recommendations in solving these problems

Quality healthcare service delivery can only be achieved if there is a successful partnership between the healthcare professionals and patients in a supportive environment that is largely determined by good leadership and governance [16]. Therefore, the three strategies that will be adopted to solve these problems will be: (1) attaining health professionals' satisfaction, (2) attaining patients' satisfaction, and (3) developing an effective leadership in the health system.

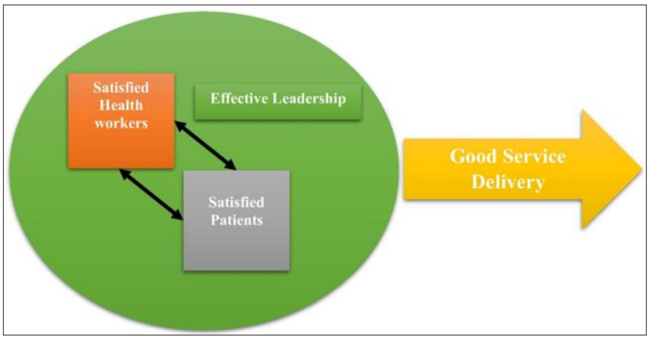

Fig 4: Framework for Effective Healthcare Service Delivery

Therefore, leadership is key in implementing these strategies.

Attaining Health Professionals' Satisfaction

To effectively attain universal health coverage by delivering quality and equitable services, the job satisfaction of workers is key. Achieving this is through the reduction of workload, improvement of salaries, improve work-life balance and create an all-inclusive leadership. All these recommendations will increase the job satisfaction of workers which will in turn improve service delivery [17].

The organisation conflicts must, hence, be tackled. The inexperience of medical doctors as healthcare managers without administrative or managerial skills may be a reason [15]. Therefore, it will be recommended to develop a training programme to build professionals with leadership skills that encompass the motivation of staff, work enthusiasm, professional intelligence and conscientiousness, self-confidence, and team building. The next recommendation is to resolve the existing conflicts by using methods such as the cognitive conflict mechanism. Understanding divergent views is important and ensuring that these conflicts serve as learning processes to make inter-professional relationships better, service delivery more effective, and the healthcare a more effective system [18].

From here on, the sense of responsibility, sense of humanity, tactics to improvise, and the technical emphasis on strong values can be built for the development of personal and organizational resilience that are needed to face the challenges that a health system poses [19].

It is evident that improving the job satisfaction of health workers also improves the satisfaction of patients in direct proportions and this in turn improves their relationship and service delivery at large [20]. Therefore, improving the job satisfaction of the health workforce will largely improve patient satisfaction.

Attaining Patients' Satisfaction

Specific recommendation tailored towards the patient is still needed to boost this strategy, which is the feedback approach. Feedback is important not only to evaluate patient satisfaction but also as a means of quality improvement of the healthcare service delivery [21].

Developing an effective health leadership

The responsibility of an organization's value system rests on its leadership [23], This can be done by the leadership's ability to transform the organisational culture, structures and policies, constantly supervising, monitoring and evaluating the effectiveness of this value system through assessments and feedbacks [15].

Enhancing human resource planning for Health (HRH) expertise in all departments to facilitate strategic leadership and support for the health system, from appropriate recruitment to the allocation of resources based on equity [10] is key in effective leadership. A good example is the use of "Workload indicators of staffing Need" (WISN) as a framework to determine health workforce staffing which was successful in Nigeria [24]. It facilitated evidence-based planning and redistribution of the health workforce [25].

The introduction of pre-triage methodology of prioritizing patients with urgent needs will reinforce proper medical care and discourage patients with intentions to overuse care [26]. The development of primary healthcare will reduce the burden on the health system and improve access and coverage of healthcare delivery. The training of health care assistants (HCA) to tackle basic healthcare needs will lessen the workload on professionals. Health promotions through mass media to improve public awareness will also improve service delivery. The use of ICT that is required in Telemedicine, using simple Models for the remote sharing of patients records with Primary Health Cares for coordinated approach of patient care is highly recommended. For long term solutions, funded research on overuse of care is paramount to always meet changing health needs and for proper policy making [27].

Alongside these improvements, the private sector should not be ignored. Policy makers should enable this sector to deliver more specialized and ancillary services that are not in the public sector as an extension of services, not as a competitor, hence increasing access and coverage. This is made possible by schemes promoting purchasing and provider payment mechanisms including National Health Insurance like in South Korea and good governance driven by a strong political will as in the remarkable health coverage in Thailand. Funding formula should be a combination of public and private sectors involvement which include taxes, philanthropy, social contributions and insurance premiums. Insurers will be entitled to packages purchased which will influence their access to services and costs. Regulations should be put in place to determine the eligibility and conditionality of payment by individual insurers [28].

Governance that will make healthcare delivery effective must adopt an evidence-based approach, using frameworks of leadership that will develop human resources policies, health sector reforms and facilitate macro-economic development [29].

Community Participation

Magaret Leung and her colleagues [30] have demonstrated that community participation is the promising approach for increasing the relevance of epidemiology in the 21st century. In the same vein, Seughyun Yoo [31] strongly suggested that this same approach best addresses the social determinants of health. Community-based approaches in improving health systems have proven to be an effective strategy and especially in low- and middle-income countries [32] [33]. For instance, community-based research which harnesses social, structural and physical environmental inequalities by actively involving members of the community and representatives of organizations have been proven to be effective in the identification of social issues, inequities and determinants affecting health [34-36]. Therefore, in trying to foster healthy relationships and making informed decisions that are significant to the health of the people, community partnership is key.

For example, the Community Awareness Motivation Partnership (CAMP), is effective in promoting safe sex behaviour in Adolescents [37]. The successful implementation and evaluation of the Community-based tool, HANS KAI in the small community of Manitoba in Canada which effectively empowered community members in supporting and promoting healthy lifestyle choices to prevent chronic illnesses [38] is another example of the effectiveness of community participation. Community-based approaches have improved disease treatment outcomes as well, and examples are: the case of Tuberculosis in Southern Ethiopia [39], another is for the improvement of Doctor-Patient relationships in Glaucoma care [40], also effective in hospital-based violence interventions [41] and also in the effectiveness of primary health care [42] among many others. Therefore, Community participation in awareness campaigns and health promotions to prevent endemic illnesses in communities is significantly cost effective in reducing disease burden, the utilization of health facilities and workload which subsequently improves service delivery and in extension, the health system.

A significant number of African countries are faced with the challenges of political instability, widespread poverty and natural disasters. The rural regions of Bangladesh, a similar context to these African settings have proven the effectiveness of community-based approaches to rapidly advance the coverage of their many health interventions thereby impressively reducing maternal mortality, infant mortality and childhood mortality [43]. Therefore, the health leadership of these African countries should technically familiarize with the concept, methodology and practice of community-based approaches to health improvement so that they could implement these approaches to their communities in a context-specific way.

Conclusion

Health problems of largely social nature in a community were identified and categorized according to the WHO building blocks. The service delivery component consisting of problems such as public overuse, staff shortage, crowding, immense workload, conflicts, expensive private sector and health staff and patients' dissatisfactions were discussed. The three strategies to tackle these problems are attaining workers' satisfaction, improving patients' satisfaction and developing an effective health leadership.

In trying to implement these strategies, various recommendations such as salary improvements; the creation of work-life balance; training programmes on managerial and administrative skills; resolution of conflicts; patient feedback both for existing and for planned services; the enhancement of human resource planning for Health (HRH); the introduction of the pre-triage methodology; the training of healthcare assistants (HCA); the development of primary health care; health promotion to boost public awareness; the use of ICT in Telemedicine; networking the various healthcare facilities and primary healthcare; the revamp of the private sector to render supplementary health services; effective health systems leadership and community participation were developed. These recommendations, if followed should solve the social problems affecting service delivery in this community, whilst attaining access, coverage and quality of healthcare to meet the objectives of Universal Health Coverage. Low- and middle-income countries, and especially of the African settings should adopt these recommendations, using this community as a template to develop and implement effective strategies of tackling the social issues that are negatively influencing the effectiveness of their health systems.

Declarations

Ethics Approval and Consent to participate: This review does not involve human participants, human data, human tissues or animals, hence, no need for approval from a relevant Ethics Committee or Institutional Review Board. In the same vein, informed consent to participate in this work is not applicable.

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