

INVENTORY OF STUDIES ON HEALTH SYSTEMS STRENGTHENING IN RWANDA AND IN AFRICA

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ABSTRACT

Despite the benefits that research on Health Systems (HS) provides, generally only a few studies have been conducted on the HS in Africa. This study aims at gathering some information on Health System Strengthening (HSS) in order to improve the health sector in Africa, particularly in Rwanda. The objective of the study is to make an inventory of studies on HSS in Africa and in Rwanda, to specify how those studies may be accessed and to indicate the agenda for future research in the domain of HSS.

A structured questionnaire and internet were used to collect data about Rwanda from several health organizations and academic institutions. As for Africa, data about the twenty randomly selected countries - four by sub-region (Northern, Central, Southern, Western and Eastern sub-regions) - were solely collected from the internet.

Six functions of the Health System were targeted. These are Leadership and Governance for Health, Health Financing, Human and physical resources for Health, Health services delivery, Health Information System and Health Technologies.

The results of the study show that the field of HSS research presents serious gaps in Africa in general. However, Rwanda has made special achievement. Overall, the best documented areas are Health Financing and Leadership and Governance for Health while the most poorly explored areas are Health Information System and Health Technologies.

It is worth recommending that Health Information System, Health Technologies and Health service delivery be well studied.

Keywords: inventory - health systems - strengthening

RESUME

Malgré les avantages de la recherche sur les systèmes de santé (SS), peu de recherches sur les SS en Afrique ont été menées. La présente étude vise à recueillir les informations sur le renforcement des systèmes de santé (RSS), afin d'améliorer le secteur de la santé en Afrique en général et au Rwanda en particulier. L'objectif de l'étude est d'inventorier les études menées sur le RSS au Rwanda et en Afrique, de préciser comment accéder à ces études et proposer un agenda pour les prochaines études dans le domaine de RSS.

Les données sur le Rwanda ont été recueillies auprès de différents organisations et établissements universitaires de santé à travers le pays au moyen d'un questionnaire structuré. Ces informations ont été complétées par la recherche sur Internet. Les données sur l'Afrique ont été entièrement recueillies sur Internet dans vingt pays africains choisis au hasard en fonction de quatre pays par sous-région (Afrique du Nord, Centrale, Australe, de l'Ouest et de l'Est).

Six fonctions du système de santé, à savoir le leadership et la gouvernance de la santé, le financement de la santé, les ressources humaines et physiques pour la santé, la prestation de services de santé, l'information du système de santé et les technologies de la santé ont été considérées.

Les résultats de l'étude montrent que le domaine de la recherche en RSS présente de sérieuses lacunes en Afrique d'une manière générale. Toutefois, le Rwanda a fait de grandes réalisations. Globalement, les domaines les plus documentés sont le financement de la santé, le leadership et la gouvernance de la santé, tandis que les fonctions les moins documentées sont le Système d'information sanitaire et les technologies de la santé.

Il convient de recommander que le système d'information sanitaire, les technologies de la santé et la prestation des services de santé soient profondément étudiés.

Mots-clés: Inventaire - Système de Santé - Renforcement

INTRODUCTION

Research on the health system, whose primary purpose is to improve health [1], and Health systems strengthening, being initiatives and strategies designed to improve the functions of the health system for better health through improvements in access, coverage, quality, or efficiency [2], is facing several challenges, mainly in developing countries:

- inadequacy of health system research to identify and diagnose health system issues,
- capacity challenges in the domain of designing and studying Health Systems Strengthening (HSS) approaches, and
- insufficient evidence-based policy development for HSS.

These challenges are associated with weak research capacity in developing countries. In other words, health system is not sufficiently documented. Therefore it is necessary to avail information on HS implementation, to release some met difficulties and then to improve HS on evidence-based principles.

Thus, the question that drives this study is whether there are studies on the HSS conducted in Rwanda and in Africa. This study is intended to make an inventory of studies conducted on HSS in Rwanda and in Africa, to specify how to access those studies and to indicate the agenda for future research in the HSS domain.

In order to attain the objective of the study, structured questionnaire was distributed to twenty-four health organizations and academic institutions in Rwanda to determine their views on HSS research and collect the existing documents on different functions of HSS like

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published articles in peer review journals, research reports and working documents.

The questionnaire was composed of five main questions on what had been done in terms of HSS research in general; what the contribution of the organization or institution was in any research they mentioned; whether they could provide the researcher with a copy of the study they mentioned; and finally about what the HSS research gap and agenda were.

In addition, a thorough search was conducted on the internet in order to collect data about Rwanda and Africa. All the 54 African countries constitute the population of this study.

The countries were grouped into five sub-regions (Northern Africa, Central Africa, Southern Africa, Western Africa and Eastern Africa) as per the UN sub-regions in Africa [3]. Using a random sample table applied on each sub-region, twenty countries - four countries per sub-region - , were selected for the sample of the study. The selected countries are the following:

Northern Africa: Algeria, Egypt, Libya and Tunisia,
Central Africa: Angola, Chad, Central African Republic and the DR Congo,

Southern Africa: Botswana, South Africa, Lesotho, Namibia,

Western Africa: Ghana, Nigeria, Senegal and Togo,

Eastern Africa: Eritria, Kenya, Tanzania and Uganda.

For the search on the internet, key words of each HS function were entered in order to download the documents regarding the function. And each document was skimmed through in order to ensure whether it qualifies for a specific HS function.

RESULTS

Interview results

Recognising that several studies have been conducted in terms of Health System, the majority of the organisations reported that the major topics treated in those studies concerned health policies and strategies, geographical and financial accessibility to healthcare services, HIV/AIDS, TB and malaria, and the under-5 years old children and maternal health issues.

Available documents on different HS areas

In Rwanda

The results of this inventory study, although not exhaustive, reveal that not many research works have been carried out in regards to HSS. The documents on HS functions, which are available in libraries of different organizations and on the internet, are presented as follows:

Leadership and Governance for Health: ten, mainly dealing with health policies and Strategic plan.

Health Financing: twenty five documents, covering both public and private health funding sources.

Human and physical resources for Health: nine documents describing human resources for Health.

Health service delivery: nine documents describing health service delivery in Rwanda were gathered. Many of

them are about quality assurance and the use of different approaches, such as Performance-Based Financing (PBF) to improve health service delivery.

Health Information System: two documents were available during the study.

Health Technologies: two documents were available during the study [Table1].

Table 1: Summary of available documents of HS functions in Rwanda

HS function	Number of available documents
Leadership and Governance for Health	10
Health Financing	25
Human and physical resources for Health	9
Health service delivery	9
Health Information System	2
Health Technologies	2
Total	57

In Africa

A few African countries have posted some documents or parts of them on the internet about different components of the HSS:

Leadership and Governance for Health: thirty seven documents were available.

Health Financing: twenty eight documents were gathered.

Human and physical resources for Health: twenty eight documents were collected.

Health Services Delivery: fifteen documents were collected.

Health Information System: six documents were available.

Health Technologies: two documents were collected [Table2].

Table 2: Summary of available documents on HS functions in Africa

Sub-region	Countries	Leadership and Governance for Health	Health Financing	Human and physical resources for Health	Health services delivery	Health Information System	Health Technologies
Northern Africa	Algeria	2	1	1	-	-	-
	Egypt	3	3	3	1	1	-
	Libya	2	-	-	-	-	-
	Tunisia	1	-	-	1	-	-
Central Africa	Angola	1	-	-	1	-	-
	Chad	5	2	2	-	-	-
	RCA	4	2	2	-	1	-
	DRC	6	-	1	-	1	-
Southern Africa	Botswana	1	1	1	-	1	-
	South Africa	1	1	-	-	1	-
	Lesotho	1	-	-	-	-	-
	Namibia	1	-	-	-	-	-
Western Africa	Ghana	-	5	2	3	1	-
	Nigeria	-	-	-	-	-	-
	Senegal	3	5	3	6	-	2
	Togo	-	-	-	-	-	-
Eastern Africa	Eritrea	-	1	1	-	-	-
	Kenya	2	2	7	-	-	-
	Tanzania	1	4	-	1	-	-
	Uganda	3	1	5	2	-	-
Total		37	28	28	15	6	2

HSS research gaps (research agenda) according to the respondents in Rwanda

Health organizations or institutions that responded to the interview highlighted different gaps to fill in the domain of the HSS research. Some of the organizations suggested that HSS research should be focused on monitoring and evaluation components, the utilization of findings and how such findings contribute towards national or government priority, raise awareness on the under-utilization of health services by some marginalized groups of people

like Batwa and widows (e.g. Family Planning), deal with promising model (cost-effectiveness) mainly related to the integration. Other organizations proposed that the HSS research should investigate in the role of unsafe abortion on maternal mortality in Rwanda, Gender-Based Violence and HIV linkage, Lesbian-Gay-Bisexual-Transgender-Intersex (LGBTI) community and public health linkage, safe abortion and women's rights. Some other organisations thought that the HSS research should be oriented toward the following: a comprehensive gap analysis, coordination structures for health research and dissemination of the research results, clinical research for more of the research works are oriented toward Health System, the issue about publication of funding and reference to funding in taking action, funding coordination, Health information management, strengthening the existing research, planning short courses for research in health sector, increase the number of medical doctors and specialists through training, improve infrastructures, equipment and supplies (laboratory reagents, drugs), healthcare organization and management, health insurance purchase capacity, quality and the use of available HIS data, and the community HIS.

HSS research gaps (research agenda) according to the available documents in Africa and in Rwanda

According to the available documents, functions are studied in the following order: Health Financing (30.6%), Leadership and Governance for Health (27.2%), Human and physical resources for Health (21.4%), Health services delivery (13.9%), Health Information System (4.6%), Health Technologies (2.3%) [Table3].

Table 3: Available documents

HS function	Available documents		Frequency	Percentage
	Rwanda	Africa		
1. Health financing	25	28	53	30.6
2. Leadership and Governance for Health	10	37	47	27.2
3. Human and physical resources for Health	9	28	37	21.4
4. Health services delivery	9	15	24	13.9
5. Health Information System	2	6	8	4.6
6. Health Technologies	2	2	4	2.3
Total	57	116	173	100.0

DISCUSSION

This study results show that the field of HSS research presents serious gaps in Africa in general. This situation is similar to the results displayed in a study conducted by Matthys and others [4] whereby the majority of

respondents highlighted major gaps in the research in health domain in Africa. Nevertheless, Rwanda has made special achievement.

Health Financing is a bit well documented in Africa as a whole. The majority of the countries have at least a research result available on the internet concerning the function. Health financing is even the best researched HS function in Rwanda, with 25 documents over 57 available during the study. Human and physical resources for Health are also a bit well documented. Nonetheless, the physical resources for Health is less documented than Human resources for Health in Africa although Rwanda has a better score than other African countries involved in this study. Leadership and Governance for Health is also a bit documented. Many countries have made their health policies, health strategic plans and other related documents available on the internet. However, the annual operational plans are not found in all the countries of study. Health Information System and Health Technologies are the least delved into areas. Two documents per area in Rwanda and respectively six and two documents in the rest of Africa were available and accessible during the study. This is an appalling situation. However, although both Health Information System and Health Technologies present great gaps to cover, the latter remains the most poorly documented of the six HS functions dealt with in this study. Health service delivery is also poorly investigated in Africa, but Rwanda's case is encouraging: nine documents were collected in the country against fifteen in other countries. This is not satisfactory.

The above description stands for the evidence that Africa has weak and under-developed national health research systems, as claimed by Kirigia and Wambebe [5], and is congruent with statement of the WHO Regional Office for Africa that 'fully functioning health research systems do not exist in many countries of the region'[6].

CONCLUSION

This study makes an inventory of research works conducted in Rwanda and in Africa. The results of the study reveal that in general Health System is not sufficiently documented in Africa, many countries have not or poorly explored their Health System. However, a tremendous effort has been made in Rwanda: all the six functions of HS have been tackled. Health Financing is the best studied in Africa. Leadership and Governance for Health is also well documented. The information in this area is considered sufficient to influence policy-makers for Health sector improvement. Even though human and physical resources for Health are relatively well documented, a lot of research works are needed due to the weight of the function in health sector. Finally, Health services delivery, Health Information System and Health technologies are more poorly probed areas.

All African countries should conduct a compressive study on Leadership and Governance for Health as well as Human and physical resources for Health. However, a special effort should be concentrated on covering the gaps in Health Technologies, Health Information System and Health service delivery.

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