Partnerships that support health systems resilience over time: a study of non-state, faith-based health providers in Africa

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Abstract

Health systems resilience is an emerging issue in health policy and systems research, yet limited information exists on how resilient health systems are developed and the different elements that contribute to whole (national) health systems resilience. In this study, resilience is understood from the socio-ecological lens applicable for complex adaptive systems. Resilience therefore is not only the ability of a health system to address disturbances and restore its basic structures and functions, but also the ability of a health system to transform or re-organise in response to a disturbance if the current system is no longer tenable for the context. Along with the rise in the interest in health systems resilience is a renewed focus on partnership with non-state providers (NSPs) to complement national health systems. The role of NSPs in supporting health systems resilience however has been largely unexplored. This study thus explores the topic of resilience with respect to health systems and focuses on a particular NSP type – namely, faith-based health providers (FBHPs). It describes four country cases of Ghana, Malawi, the Democratic Republic of Congo, and South Sudan - where FBHPs, though their inclusion in the health system and the activities they undertook, appear to have influenced the resilience of national health systems. FBHPs have played critical roles in strengthening health systems, which has been argued to be a key source of resilience. Their presence also diversified the actors in the health system, enabling them to step in as an alternative service provider when government services were unavailable. Historically, FBHPs appeared to be more flexible which allowed them to respond more quickly during times of crises. This flexibility in operations, coupled with their mission to serve marginalized populations, have supported the development of innovations for the poor, which in some instances have been adopted by national

governments. As such, FBHPs have not only acted as buffers in times of shocks or stressors, but have also supported the transformation of national health systems for the better. Recent trends of closer integration with governments however are increasing the interdependencies between FBHPs and the public sector, which have potential to make health systems more vulnerable and less resilient.

ACRONYMS

ACHAP	Africa Christian Health Associations Platform
AHPSR	Alliance for Health Policy and Systems Research
ART	Antiretroviral therapy
CAS	Complex Adaptive System
CBHI	Community-based Health Insurance
CDC	Centers for Disease Control and Prevention
CHA	Christian Health Association
CHAG	Christian Health Association of Ghana
CHAM	Christian Health Association of Malawi
CHD	County Health Department
CHW	Community health worker
CORDAID	Catholic Organization for Relief and Development Aid
DDH	District Designated Hospital
DFID	Department for International Development
DRC	Democratic Republic of Congo
EU	European Union
FBHP	Faith-based health provider
FBO	Faith-based organisation
HIC	High income countries
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
HMIS	Health Management Information System

HPSR	Health policy and systems research
HREC	Human Research Ethics Committee
HSG	Health Systems Global
IMA World Health	Interchurch Medical Assistance World Health
IRHAP	International Religious Health Assets Program
KM	Kilometres
LMIC	Low and middle income countries
MOH	Ministry of Health
MOU	Memorandum of Understanding
NGO	Non-governmental organisation
NHIS	National Health Insurance
NSP	Non-state provider
PHC	Primary health care
PFP	Private, for-profit
PNFP	Private, not-for-profit
PPP	Public-private partnership
SANRU	Santé Rural
SAP	Structural Adjustment Programs
SDG	Sustainable Development Goal
SES	Socio-ecological system
SLA	Service Level Agreement
UCT	University of Cape Town
UHC	Universal Health Coverage
WHO	World Health Organization

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Part A: Protocol

The contribution of non-state, faith-based health providers to health systems resilience in Africa

Purpose

Health systems resilience[1] is an important topic in current international health discussions. The World Health Organisation (WHO) and donors have recently urged for a focus on resilient health systems (European Commission 2014; Kieny and Dovlo 2015). It is also the theme for the upcoming Global Symposium on Health Systems Research, highlighting its importance as a topic of study (Health Systems Global 2015). Resilience is the ability of the health system to continue producing good health outcomes, in both routine times and during times of 'shocks' or threats to the system (Kruk et al. 2015). These disturbances can be acute, as in the case of short-lived health epidemics, natural disasters, or economic crises. Other disturbances are chronic 'everyday' challenges that affect the ability of a health system to produce good outcomes, such as limited staff capacity or resources. Resilient health systems have multiple dimensions, including the ability to learn and adapt to environmental disturbances, the ability to improve its performance continuously, and the ability to continue producing good health outcomes over time (Kruk et al. 2015; Maresso et al. 2013). It has emerged as a topic of importance as there is increased recognition that health systems are vulnerable to these disturbances; unless resilience is developed, years of investment in health could be reversed. Despite its emerging importance, only little

[1] There are ongoing and unresolved debates on whether the correct form of this new term is "health systems resilience" or "health systems' resilience". Given that there is not accepted standard, we have chosen to use the former.

documentation is available about how resilient health systems are built and what contributes to resilience.

One proposal to improve health systems resilience is more effective partnerships. Non-state providers (NSPs) including faith-based health providers (FBHPs) are crucial health system actors who provide anywhere from 6% to over 50% of health services, particularly in Africa where they have been present for over a century (Asante 1998; Kagawa et al. 2012; Vogel et al. 2012; Wodon et al. 2014; Maurice 2015; Olivier et al. 2015; Gilson et al. 1994). Throughout these times, it is likely that FBHPs were present during a disturbance or shock to the entire national health system. Although FBHPs have been documented to be a key actor in the aftermath of general humanitarian crises (Ager 2011; Komino 2014), there is limited literature available specifically on their role and contributions to whole health systems resilience.

The primary aim of this study is to understand how non-state FBHPs, contribute or detract from whole health systems resilience. The research will have an exploratory and descriptive purpose to better understand the situation, and to describe various cases where FBHPs have played a role in supporting resilience. The findings of this study are expected to contribute to the severely limited literature available on the role that FBHPs play in resilience building. There is potential to leverage these findings to inform further research on the topic, and to develop more effective partnerships for health systems resilience in the future.

Background

The concept of resilience is an emerging topic in health systems research. The WHO has called for focused attention on building resilient health systems, as well as prominent donors including the European Union (EU) and the United Kingdom Department for International Development (DFID) (DFID 2011; European Commission 2014; Kieny and Dovlo 2015). Some of this impetus comes from the recent Ebola epidemic in West Africa, which highlighted the fragility of health systems, and the need for resilience in the face of pandemic shocks (World Health Organization 2014a). Prior to the Ebola outbreak however, there was already increased recognition of various threats to the ability of a health system to produce good health outcomes over time (DFID 2011; European Commission 2014). These threats range from environmental disasters to economic crises, from health epidemics and conflict; and can be classified as acute threats characterised by short and intense periods of stress. In addition to acute threats, chronic threats also exist such as limited resources or staff capacity. Both types of threats affect the performance of health systems, and have potential to undermine the many years of investments made in health. Resilient health systems can contribute towards continued progress in achieving sustainable development and contributing towards the attainment of the good health and well-being for all, as outlined in the Sustainable Development Goals (SDGs) (United Nations 2016). Improving health systems resilience and understanding the factors that contribute to it are therefore priority areas of work and consideration.

The topic of resilience has been studied in other subject areas. In physics resilience is the ability to absorb shock and retain its original form; in biology it is the ability of the ecosystem to resist damage and recover quickly; while in psychology it is the ability of the

individual to deal with high levels of stress then resume life thereafter (Maresso et al. 2013). Organisational studies have also explored resilience; in this field it is defined as the ability of a firm to adapt to environmental changes and develop collective behaviours and attitudes that enable appropriate responses to uncertainty and complexity (see Lengnick-Hall and Beck 2005; Maresso et al. 2013). Resilience in a broad sense can therefore be defined as the ability to maintain one's fundamental nature or ability to create value in the midst of threats in the environment (Baser and Morgan 2008).

Although the topic of resilience has been studied previously, the definition of resilience for health systems is only starting to emerge. One dimension is the capacity of actors, institutions and populations to absorb disturbances in the form of threats or shocks and continue producing its value of maintaining good health outcomes in the long run (see European Commission 2014; Kieny and Dovlo 2015; Kruk et al. 2015; McKenzie et al. 2015). Another dimension is the ability to learn during times of crises and adapt as the context necessitates. This implies continues iteration and adaptation in line with changes in the environment (Baser and Morgan 2008; Cutter et al. 2008; DFID 2011; European Commission 2014; Kulig et al. 2013; Maresso et al. 2013). Some have argued that resilience is not only the ability to absorb threats and respond to it, but also to 'bounce back better' afterwards; this is particularly relevant for shocks, but could also be applied to chronic threats so long as the system performance improves (DFID 2011). Based on these dimensions, resilient health systems could be defined as having the following characteristics.

- Learning and adaptation – The ability to gather information from the environment and shift in order to respond appropriately to the threat.

- Continuous improvement – The ability to improve performance based on its experience of adapting and transforming as a result of threats.
- Long-term orientation – The ability to sustain performance that contributes to good health outcomes over time.

Despite much discussion on the topic, limited information is available on how resilient health systems are built or the specific aspects that contribute to it. Kruk et al. (2015) propose that resilient health systems must be aware, diverse, self-regulating, adaptive, and integrated - and there is potential for this framing to be applied to future assessments and program designs. Kieny and Dovlo (2015) further add to these requirements by the inclusion of trust and community engagement, strengthening sub-national health systems, and improvements in partnerships for efficient and effective collaboration. These proposals are primarily in response to acute shocks in health systems as opposed to chronic or routine challenges that disrupt performance as they emerged from the recent Ebola outbreak, though Kieny and Dovlo (2015) do state that resilience requires the capacity to respond to both routine and unexpected challenges. There is value therefore in exploring these proposals given the limited information available on how to build resilient health systems.

The concept of partnerships for supporting resilient health systems is one that is proposed to be explored further in this study, with a particular focus on the contribution of NSPs. NSPs are those formally classified as being outside of the public sector who work in health, including commercial companies, non-governmental organisations (NGOs), pharmacies, and faith and community-based organisations, among others (Palmer 2006; Batley and Mcloughlin 2009). They receive little oversight from government though they are some of

the main providers of primary health care and water supply and sanitation in low and middle income countries (LMICs) (Batley and Mcloughlin 2009). There has been a recent recognition of the role of NSPs in health care provision, along with the acceptance that government is not the only health care provider present in many countries (Walker et al. 2013). The WHO and the Alliance for Health Policy and Systems Research (AHPSR) (World Health Organization 2014b) have called for additional research to better understand the contributions of NSPs to health systems, so as to better harness their competencies for health systems strengthening. As one dimension of resilience is the ability of actors to absorb and respond to threats, and NSPs are key actors in a health system, there is scope to understand their contributions to resilient health systems.

An important NSP in LMICs is the faith sector, particularly FBHPs. FBHPs deliver anywhere from 6% to over 50% of health services in weak or conflict-affected states (Asante 1998; Kagawa et al. 2012; Vogel et al. 2012; Wodon et al. 2014; Maurice 2015; Olivier et al. 2015). In 2012, over 100,000 FBHPs were documented to operate in Africa, some of which have been present for over a century; many have sustained their presence despite changes in government and increased focus on the public sector for health care provision (Aylward 2012; Duff and Buckingham 2015; Olivier et al. 2015). Historically, FBHPs provided missionary-related services that included health care, and were in most cases the first to offer biomedicine in Africa (Duff and Buckingham 2015; Olivier et al. 2015). They usually offered facility-based services and trainings, and through the extension of their facility services, some provided primary- and home-based care (Schmid et al. 2008). In recent years, FBHPs were prominent in the response to the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic, accounting for 20% of the organisations

involved in the response (Maurice 2015; Olivier et al. 2015). A binding characteristic of FBHPs are the religious values that underlie their humanitarian and development work (McGilvray 1981; Wodon et al. 2014; Olivier et al. 2015; Tomkins et al. 2015). Their missions are often characterized by prioritization of the poor and marginalized in societies.

FBHPs have demonstrated several competencies in health service provision in Africa. Their preference for serving the poor is important as they often provide healthcare to rural communities where government services are currently unavailable (Ewert 1993; Asante 1998; Olivier et al. 2015; Gilson et al. 1994). Their mission of redressing inequities has been the drive of their work for a long time, even before these were outlined in the Millennium and Sustainable Development Goals for poverty elimination (Asante 1998; Duff and Buckingham 2015). Additionally, their often holistic, community-based approach to health means they are often better able to address the needs of the people they serve (Schmid et al. 2008). Through this community focus and long-term presence, they have been able to build good relationships and mutual understanding with those they serve (Gilson et al. 1994). People have also expressed more satisfaction with health services offered by FBHPs, stating the receipt of more compassionate care from health workers who are motivated by their faith (Schmid et al. 2008; Olivier et al. 2015; Gilson et al. 1994). FBHPs have also provided health services when governments were weak, from upholding the health system in Zaire after it gained independence from Belgium, to implementing critical health care interventions in hard to reach provinces in the renamed Democratic Republic of Congo (Batley and Mcloughlin 2009; Palmer 2006).

In recent years, recognition of the important role played by FBHPs has emerged and their partnerships with government have increased in number and formality. In the past there was limited alignment of FBHPs with national priorities or coordination with national referral systems (Aylward 2012; McGilvray 1981; Wodon et al. 2014). Historically, three types of relationships between FBHPs and government existed: (1) private entrepreneurs, where FBHPs adhered to government directives but received no support from them, (2) cooperating and collaborating, where FBHPs received some funding from government but were not officially part of the health system, and (3) functionally integrated, where FBHPs were an integral part of the national health system (Asante 1998). In recent years, FBHPs have moved towards functional integration via service level agreements (SLAs), contracts, and alignment of programs with national priorities (Schmid et al. 2008; Maurice 2015; Olivier et al. 2015). Umbrella networks including Christian Health Associations (CHAs) have emerged to provide FBHPs with a united voice in a country, and facilitate ease of negotiation with governments (Dimmock et al. 2012; Schmid et al. 2008).

Although literature exists on FBHPs and their role in health care provision, little is known about their contribution to resilient health systems. Komino (2014) asserts that in places where environmental threats are common, informal groups including FBHPs have vast potential to boost community resilience due to the opportunities to disseminate information to the public and their ability to strengthen collaboration among NSPs. However, little additional research has been conducted however on this topic. Dimmock (2012) also argues for improved partnerships with FBHPs for health systems strengthening, in recognition of their long-term presence in national health systems. Documentation on the

role of FBHPs from a resilience perspective is however limited, and thus further exploration in this area is warranted.

Research question and significance

Non-state FBHPs have been shown to complement the efforts of national governments. In Arica, they have provided health services for many decades despite changes in the national health system. Their commitment to health service provision in LMICs is evident, and their status as an important partner within health systems is likely to remain in the future. Given the emerging importance of building resilient health systems and the key role played by FBHPs in health care provision, it would be useful to better understand the nature of their work and their contributions to resilience.

This study seeks to answer the research question: **"How do non-state faith-based health providers contribute to resilient health systems in Africa"?**

The FBHPs to be recruited are those that provide facility-based care and are based in African countries which still have a prominent number of FBHPs present (usually represented as part of the Africa Christian Health Associations Platform (ACHAP) network. An existing research partnership is in place with the Health Policy and Systems Division at the University of Cape Town (UCT), therefore access to this study population is feasible. Resilient health systems are operationally defined as a health system that is able to continue delivering good health outcomes in the face of disturbance - either a shock or stressor. This is a starting point for inquiry but the other aspects of resilience, including learning and adaptation and continuous improvement, will also be explored.

Sub-questions for the study include:

- What is the role of FBHPs during regular, non-crisis times time? What is their role during times of crises?
- How do they interact with government during regular, non-crisis times and during times of crises?
- What is their perception on how they contribute to resilience building of their health system?
- What capacities emerge that FBHPs may need to be able to contribute to building resilient health systems?

The study aims to better understand the role that NSPs, specifically FBHPs, play with regards to health systems resilience, and how they contribute or detract from it. The findings of this study are expected to contribute to the limited literature available on the role of FBHPs through the resilience perspective. There is also potential to leverage these findings to inform further research and the development of more effective partnerships for building health systems resilience.

The research will have an exploratory and descriptive purpose at the cross-level of analysis. It has an exploratory purpose as it seeks to understand what is happening in a little understood situation - in this case FBHPs and their contribution to health systems resilience. Furthermore, it seeks to understand a phenomenon (the role of FBHPs) in a different light (a resilience perspective). It also has a descriptive purpose as cases will be developed that describe different profiles of how FBHPs have contributed to resilience in specific instances

where health systems were threatened. The study will be at the meso-level of analysis as it looks to understand how select FBHPs responded to the local needs and circumstances in their context. It is also at the macro-level of analysis, as the combined cases will provide information on the architecture of health systems in its attempt to understand FBHP engagement with other health system actors, specifically government.

Methodology

A flexible study multiple-case study design will be used to understand the contributions of FBHPs to resilient health systems. In this study with both an exploratory and descriptive purpose, a flexible design is appropriate as the aim is to unpack a phenomenon where the investigator has little knowledge or control over events (Gilson 2012). The limited understanding of the phenomenon also makes tight pre-specification prior to data collection unfeasible, hence a fixed study design is inappropriate. The variables under study will therefore have room to evolve throughout the course of the research, and the line of inquiry further specified as data collection occurs. This enables the detailed framework of the research design to emerge throughout the study (Robson 2002).

Research strategy

A case study is the most appropriate research strategy for the question proposed. Yin (2009) states that case studies are appropriate when the aim is to answer 'how' and 'why' questions, when the researcher has limited control over behavioural events, and when the event is contemporary. It examines a real-life situation within its context through the review of multiple sources of evidence (Gilson 2012). This is particularly relevant for health systems research as a phenomenon is usually influenced by its context, and as it seeks to understand

complex relationships and behaviours between actors. In the phenomenon of FBHPs and their contribution to whole systems resilience, the context through which FBHPs operate is influenced by the disturbance the system faces (context), as well as their relationships with national health systems. A case study will not only enable understanding of the phenomenon, but also allow for description of specific experiences where FBHPs have contributed to health systems resilience.

A multiple case study approach is considered appropriate for the data analysis planned. The case unit for analysis will be specific events or occurrences when the ability of a health system to deliver good health outcomes was threatened, and where FBHPs have played a role in the health system during this event; these can be either acute or chronic threats. Remarkable events in relation to health systems threats will therefore be sought as the case units for analysis. A multiple case study will allow for cross-case data analysis and the potential generation of a conceptual framework on how FBHPs contribute to health systems resilience, through comparing and contrasting different events that allow for analytic generalization to other situations (Gilson 2012). Improved validity and confidence will also be possible through literal replication, as the chances will increase of the study findings holding true across various cases (instead of due to the specific characteristics of each case) (Keen and Packwood 1995; Yin 2009).

The main case study proposition is that FBHPs contribute in some way to health systems resilience by virtue of their mission (or values) and operations in LMICs. As previously mentioned, FBHPs have been present in their areas of operation for years; this ongoing presence even through times of reforms and massive changes must have presented

instances where FBHPs have supported health systems to continue providing good health outcomes in the midst of health system disturbances. Perhaps there is something inherent in the mission of FBHPs or the structure of their operations that enable resilience building. This proposition will direct the initial data collection towards better understanding the role of FBHPs in health systems, and then narrow in on themes and concepts related to resilience once initial data is collected. As this is a flexible research design, this proposition has room to evolve if other propositions emerge throughout the course of the study. Rival theories that could be tested against this proposition will be sought throughout the course of data collection and analysis. These rival theories will likely revolve around the specific characteristics of cases. For example, a particular FBHP may have been present at the right time and place during the time of stress, or have particularly good leadership that enabled them to contribute significantly to resilience; these would be particular instances that are not related to the proposition that their contribution to resilience is through their inherent mission and operations.

The case study development will be conducted over two phases (depicted in Figure 1 below). The initial phase will be a brief survey of members of the ACHAP network. The survey results will be reviewed to identify and select three case studies that fit the aforementioned case unit description. The second phase will be the development of three descriptive cases that provide insight into how FBHPs contribute to health systems resilience.[2]

[2] Note that it is possible that fewer or more cases will be undertaken – but this will be decided after the first phase of research, and will depend on what variation is visible at that time.

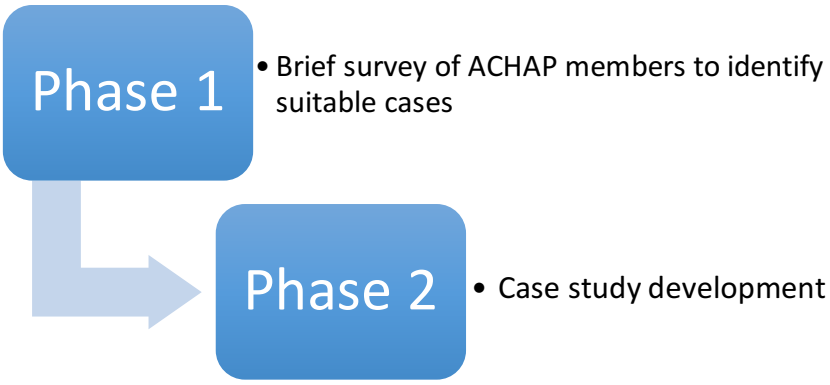

Figure 1: Phased Approach to Multiple Case Study Development

Approach to data analysis

Data analysis will be conducted immediately after data collection, including translation (between English and French) and back-translation as needed. Codes will be developed both deductively and inductively, initially from the thorough literature review and thereafter from the data collection. A thematic analysis will then be conducted on the data. Data triangulation will be conducted across the multiple sources of evidence, and comparison between cases will also be conducted. Rival theories will also be tested during the data analysis. The aim for the analysis is to describe the contributions of FBHPs to resilience, and if possible to generate a conceptual framework using findings from the diverse cases that can be analytically generalizable.

Rigour will be maintained throughout the study in various ways. The different tactics to be used are outlined in the table below.

Table 1: Approaches to Ensuring Rigour (Source: Author)

Criterion of Trustworthiness	Tactic	Stage of Research
Confirmability	• Thorough literature review to identify key concepts • Multiple sources of evidence to be collected • Key informants and supervisor to review draft report; member checking • Reflexivity – awareness of researcher influence on question framing and research design, awareness of influence of research on the researcher	Research design Data collection Data analysis and write-up
Dependability	• Create audit trail (protocol, databases, notes throughout research)	Research design Data collection Data analysis
Credibility	• Search for rival explanations in data • Triangulation – across investigators, data sources, data collection methods, and cases • Consideration of negative cases • Purposive case selection to generate diverse cases • Debriefing and support from supervisor	Data Analysis
Transferability	• Replication logic in multiple cases • Aim for analytical generalizability	Research design Data analysis

Characteristics of study population

Phase 1 of the study will survey all consenting members of the ACHAP network. ACHAP is an advocacy and networking platform for CHAs and other Church Health Networks in sub-Saharan Africa; currently 28 countries are represented in the network. CHA members are a good entry point for learning about FBHPs and resilience as they contribute large shares of health facilities in many African countries (as outlined in Figure 2 below; MoH = Ministry of Health, FBO = faith-based organisation).

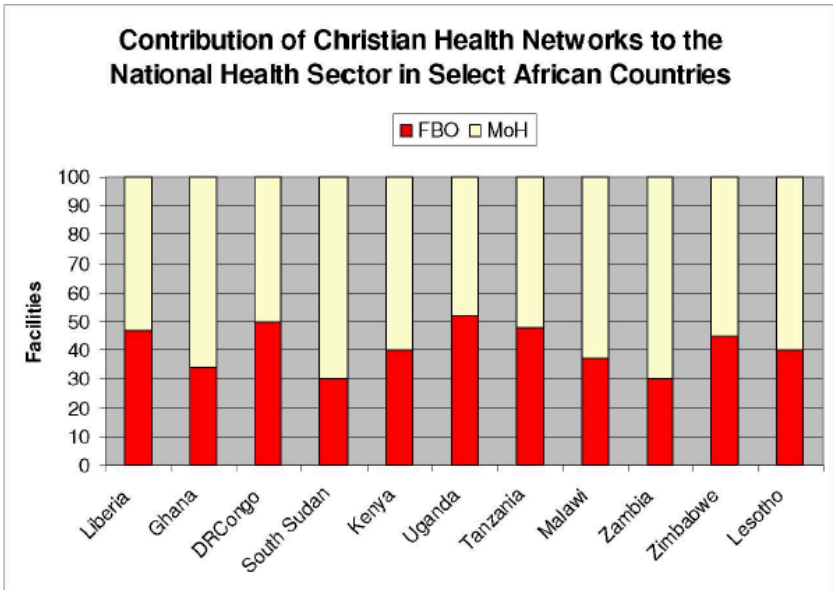

Figure 2: Contribution of FBHPs to National Health Systems (Source: Africa Christian Health Associations Platform, 2014)

The online survey will be sent to the country representatives, with the inclusion criteria being their active membership in the ACHAP network. Analysis will then be conducted on the survey, after which three (3) cases will be selected for participation in Phase 2. Purposive sampling will be used to select a diverse set of cases that will enable examination of the role of FBHPs in resilience building. Snowballing through the survey respondent will then be conducted to identify 3 – 5 key informants in each country for the in-depth interviews. No vulnerable populations are expected to participate in this study, as all representatives are expected to be over 18 years of age with non-impaired decision making capacity. The research will be conducted remotely, the first phase via an online survey and the second phase via telephone (or Skype) interviews and desk reviews of relevant documents. The participants would be able to conduct the online survey and telephonic

interviews at a location convenient for them. The researcher will sit in a private room where the interview cannot be overheard, and will request the participant to do the same.

The research will be conducted in English and French for the inclusion of both English and French-speaking ACHAP member countries. A translator will be hired to translate the informed consent forms, introductory letters, and data collection tools. The translator will also provide support for conducting the interviews and translating the responses from both the surveys and the interviews, and translation of key documents. (The primary research does speak rudimentary French, so this translator would also be utilized to check translations and back-translate).

Recruitment and enrolment

Participants will be recruited using the formal network approach with the ACHAP network as an entry point. Permission will be requested from the gatekeeper of the ACHAP network, specifically the ACHAP Secretariat based in Kenya (see Appendix A: ACHAP Information Briefs). Thereafter, all members will be recruited into the first phase of the study via a formal letter to be sent through email (including an information brief, see Appendix A). Recruitment for the second phase will be purposive and based on remarkable cases that emerge from the first phase.

Enrolment into the study will be via a formal consent process. In Phase 1, consent will be requested via email. The survey will have a line where an electronic signature for consent can be filled in. In Phase 2, consent will be requested formally via email and once more

verbally prior to starting the telephone interview. Please refer to the "Informed Consent" section further in this document for additional details on enrolment.

Research procedures and data collection methods

Phase 1 will involve a survey to be administered via email. The survey will be brief and typed in a Microsoft Word Document, which will be sent via email to all ACHAP members. They can choose to participate in the study by answering the questions in the document and sending it back to the researcher, along with the informed consent form that includes their electronic signature. In the introductory email and consent form, participants will also be informed about the potential to follow-up with them to develop the case studies after the survey data is reviewed. The survey will be active for 2 weeks, with a reminder sent to participants at the beginning of the 2nd week after the initial request for participation is sent. Some personal data will be collected in the survey including the name and position of the participant and the country they operate in; this will enable the researcher to contact the participant should their case be eligible for Phase 2. This identification will remove the anonymity of the respondent to the researcher and her supervisor, however their identity will be kept confidential and anonymized in any presentation of the study findings. The survey can be taken at a time and place that is convenient for the respondent, and will take no more than 20 minutes to complete. The subject matter and sample questions to be covered in this survey is outlined in Appendix B: ACHAP member survey and consent form.

Phase 2 includes the case study development of three (3) cases chosen after reviewing the survey data collected in Phase 1. The cases that will be selected must align with the aforementioned case unit definition. Cases will also be selected based on the nature of the

disturbances faced by the health system (for example, natural disasters versus conflict), with the aim of identifying diverse cases. In-depth interviews with select respondents from Phase 1 will be conducted along with participants identified by the survey respondent through a snowballing approach. The request for interviews will be sent via email (see consent forms in Appendix C and D). Telephone interviews (or Skype interviews where possible) will then be arranged with those who respond with interest to participate in Phase 2 of the study, at a time that is convenient for them. The researcher will sit in a private room where the interview cannot be overheard, and will request the participant to do the same. The interview is expected to take approximately 1 hour to complete. A sample of the questions for the in-depth interviews is outlined in Appendix E. Participants will also be requested to share key documents to review in cases where there is a need to supplement the information gathered from the interviews, which will potentially take up to another 30 minutes of their time (but is not part of the interview).

Data safety and monitoring plan

Adverse events are not expected in this research. The researcher will be observant throughout the telephone interview if the participant sounds distressed or uncomfortable. Should this occur, the researcher will ask the participant if they would like to continue with the interview now, reschedule for a different time, or remove themselves from further participation in the study.

Data analysis

Data collected from Phase 1 will be received in a Word Document and recorded on Excel. Some personal data including their name, contact information, and country where the

respondent comes from will be recorded and available to the researcher and her supervisor alone. This will enable the representative to be contacted in case they are suitable for Phase 2 of the study. The data will be backed-up online, on a Dropbox that is password protected and accessible only to the researcher and her supervisor, and on an external hard drive accessible only to the researcher. The data from these countries will be reviewed in order to choose the most relevant cases to develop the case studies.

For Phase 2, telephone (or Skype) interviews will be recorded if the respondent agrees to its recording; otherwise the researcher will take notes on a notebook only accessible to the researcher. Names and contact information of the respondents will be recorded on the notebook as well as the country from which the respondent comes to enable follow-up should additional data be required, but will only be available for the researcher and her supervisor to view. Audio recordings and documents for desk review will be stored on the aforementioned Dropbox (password protected and accessible only to the researcher and her supervisor), and also on the external hard drive accessible only to the researcher. The audio recordings and notes from the interviews as well as key documents will then be uploaded on Nvivo, a data analysis software. The Nvivo file will be stored on the aforementioned Dropbox and external hard drive. A thematic analysis will be conducted using Nvivo to understand the case studies and develop a conceptual framework if possible on how FBHPs contribute to health systems resilience.

Ethical consideration

Potential risks and discomforts

Few risks or discomforts are expected in this study. The in-depth interviews in Phase 2 may cause discomfort if the interview inadvertently touches on topics that elicit a negative emotion in the participant and cause psychological harm. There is also a slight risk of misrepresentation of FBHPs or the cases, or of reporting which presents either the FBHP network or public sector in an unflattering way – which could have some reputational risk, or possible damage to collaborative standing or relationships as a result. However, the probability of this occurring is very low, and the researcher will work to be sensitive to, and mitigate such risks and potential harms throughout the study and after its completion. The study supervisor, and ACHAP partners will provide oversight and advice in relation to managing this kind of risk should it emerge.

The overall risk of the study is therefore expected to be minimal, where the probability and magnitude of harm or discomfort is expected to be no greater than those usually encountered in daily life. The research will adhere to the principles in the Helsinki Declaration of 2008 for medical research involving human subjects, and in the University of Cape Town (UCT) Code for Research Involving Human Subjects.

The researcher will be sensitive in the approach to potentially negative topics in order to minimize the risk of discomfort during the interviews. She will also give the participant ample time to respond, and as previously mentioned, the option to stop or reschedule the interview. To minimize the risk of misrepresentation, the researcher will conduct member-

checking throughout the interview process in Phase 2 to check if they understand what the participant is explaining.

Member checking will also be conducted in the analysis stage. Key lessons from the initial analysis will be shared with those who participated in the interview, and elect to receive this feedback. Additionally, the researcher and her supervisor will identify 2-3 participants (most likely from the ACHAP Secretariat) to review initial draft findings, as well as pre-publication drafts of any outputs – and from whom feedback will be requested.

Potential benefits

The potential benefits of this study for members of the ACHAP network are three-fold: 1) they could gain a better understanding of their contribution to health systems through the lens of resilience, 2) they can gain an understanding of the aspects of their programs that contribute to resilience and may be useful to continue, and 3) they could understand the gaps in their work with regards to resilience building and where possible, what capacities need to be built in order to be able to contribute to resilience-building. The findings of this study could also provide potential benefits to the public health system, to health policy and systems researchers and actors, and to society. It could improve the understanding of the nature of the work of FBHPs and their role in health systems, and enable further acknowledgement of their role in health systems strengthening. Improving the potential of FBHPs to support resilience building could also be beneficial in the long run, by helping communities or the state to improve their performance and adapt as needed to their context, and to prepare for, respond to, and recover from future health system disturbances.

Alternatives to participation

Those who choose not to take part in the study will still benefit from the findings, as they will have access to the results through the ACHAP network.

Informed consent process

Consent for participation in the various phases of the study will be obtained prior to starting data collection. Information regarding the study and its phases will be sent via email, as well as the potential benefits and risks involved with participation, the expected time required for participation Phase 1 and Phase 2, and how the findings will be used and disseminated. This will enable potential participants to consider whether they would like to participate in the study. The consent form will include a place to insert their electronic signature. For the second phase of the study, an email will be sent to the selected respondents explaining this phase in further detail, and requesting their participation. A form will be included in this email for them to sign and send back to the researcher should they wish to participate in this phase. Once this form is received, the researcher will arrange a mutually convenient time for the interview. Prior to diving into the interview questions, the researcher will explain the study once more and verbally request consent. At all phases of the study, the participants have the option to choose not to respond or to withdraw from the study. As previously mentioned, all documents including the informed consent forms will be in both English and French.[3]

[3] During the research, it became necessary to sign a further data agreement with IMA World Health – before they could be interviewed or share project data.

Only adult participants with the capacity to give informed consent will be recruited in the study. If there is suspicion of impaired decision-making capacity, the participant will be unable to participate in the study.

To determine if participants understand the information provided regarding the study, the potential participants will have the option to contact the researcher for further information prior to starting the survey. They will also have the ability to ask questions to the researcher prior to the start of the interview, and the researcher will ask a few questions to ensure the participants understand the participation requirements and details of the study.

Consent forms to be used in the research will be for adults only, in English and French. Copies of the consent form for both the survey and interview is included in Appendices B, C and D.

Privacy and confidentiality

Some personal data of participants will be collected and recorded to enable for follow-up in the case study development. This data will only be available to the researcher, and will be anonymized upon entry into the data analyses software. The case studies will have specific information regarding the country context that may prevent their identity from being kept fully confidential. This will be made clear to the participants prior to obtaining their consent, to ensure that they understand the accompanying risks and benefits of their participation.

As some of the survey responses will be channelled through Mr. Mike Mugweru at the ACHAP Secretariat, Mr. Mugweru will be requested to keep the identities of the survey

respondents and the content of the responses confidential. The translator will be based in Cape Town and will not have any relationship or contact with the study participants, and thus participant responses will also be kept confidential. If the translator is used for the interviews in Phase 2, they will be requested to sign an agreement to keep the identities of the study participants and the contents of the study confidential.

The email survey data, audio recordings, and documents and notes collected for the study will be stored on a password protected Dropbox only accessible to the researcher and her supervisor, and backed up in an external hard drive only accessible to the researcher. The external hard drive will be stored in a locked cupboard in the office of the researcher, in the Falmouth Building at UCT. Any hard copy notes taken from the interviews will also be stored in the aforementioned locked cupboard. The hard copy data will be shredded and thrown away once the analysis is completed. The electronic data will be kept for 5 years after the completion of the study, after which it will be deleted.

Reimbursement for participation

It will be made clear to participants that no reimbursement will be made for their participation in the study, though have potential to benefit from the study findings.

Emergency care and insurance for research-related injury

It is not expected that Emergency Care and Insurance for Research-related injury will be required in this study, as all the data collection will be conducted remotely and the participants will not be subject to physical risks outside of the ‘every day risks standard’.

What happens at the end of the study?

The study findings will be disseminated to all members of the ACHAP network via a journal article that will be written as part of the Masters in Public Health thesis requirements. If possible, the paper will also be submitted to relevant academic journals and the findings presented at conferences. There is also potential to present the study findings to a global audience at the Health Systems Global Symposium (November 2016) where the theme is Resilient and Responsive Health Systems[4].

Timeline

The research is scheduled to be conducted in the year 2016, as outlined in the table below.

This timeline is flexible and can be extended to February 2017 in cases of delays with engaging ACHAP members.

Activity	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Submission to Ethics Committee								
Conduct Literature Review								
Phase 1: Brief survey								
Phase 2: Analyse Phase 1 data; select 3 cases								
Phase 3: Case study development - Interviews & Document Reviews								
Data Analysis								
Report Writing								
Final Thesis submission								

[4] Note that after this protocol was formally submitted, this research was indeed presented at HSG2016, as part of an organised panel session.

Budget

This study is expected to have budget available for translation and telephone calls. This study is jointly supported by the Health Policy and Systems Division (University of Cape Town), the International Religious Health Assets Program (IRHAP), and CORDAID (the Catholic Organisation for Relief and Development AID).

Budget in USD					
Item	**Unit**	**Unit Cost**	**Quantity**	**Total (USD)**	**Notes**
Translator	Hours	10	20	200	data collection tools, during interview, documents
Telephone calls	Hours	25	15	375	average Skype charges to call phones in Africa
			Total Budget	**575**	

References

Ager, A. 2014. Faith and the secular: tensions in realising humanitarian principles. *Forced Migration Review.* 48**:** 16-18.

Asante, R. K. O. 1998. *Sustainability of church hospitals in developing countries: a search for criteria for success.* Geneva: World Council of Churches.

Aylward, L. 2012. *Global Health and Africa: Assessing Faith Work and Research Priorities.* London: Tony Blair Faith Foundation & World Faiths Development Dialogue.

Baser, H. & Morgan, P. 2008. *Capacity, change and performance: Study report.* Maastricht: European Centre for Development Policy Management.

Batley, R. & Mcloughlin, C. 2009. *State capacity and non-state service provision in fragile and conflict-affected states.* Birmingham: Governance and Social Development Resource Centre.

Cutter, S. L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E. & Webb, J. 2008. A place-based model for understanding community resilience to natural disasters. *Global Environmental Change* 18**:** 598-606.

DFID. 2011. *Defining Disaster Resilience: A DFID Approach Paper.* London: Department for International Development.

Dimmock, F., Olivier, J. & Wodon, Q. 2012. Half a century young: the Christian Health Associations in Africa. *In:* Olivier, J. & Wodon, Q. (eds.) *Strengthening faith-inspired health engagement, Vol 1: The role of faith-inspired health care providers in sub-Saharan Africa and public-private partnerships,* 71-103. Washington, DC: The World Bank.

Duff, J. F. & Buckingham, W. W. 2015. Strengthening of partnerships between the public sector and faith-based groups. *The Lancet* 386**:** 1786-1794.

European Commission. 2014. *Communication from the Commission. On Effective, accessible and resilient health system.* Brussels: European Commission.

Ewert, D. M. 1993. *A new agenda for medical missions.* Brunswick: MAP International.

Gilson, L. 2012. *Health Policy and Systems Research. A Methodology Reader.* Geneva: World Health Organization.

Gilson, L., Sen, P. D., Mohammed, S. & Mujinja, P. 1994. The potential of health sector non-governmental organizations: policy options. *Health Policy and planning* 9**:** 14-24.

Health Systems Global. 2015. *Resilient and Responsive Health Systems the focus of the Fourth Global Symposium on Health Systems Research* [Online]. Available: http://www.healthsystemsglobal.org/blog/45/Resilient-and-responsive-health-systems-the-focus-of-the-Fourth-Global-Symposium-on-Health-Systems-Research.html [Accessed 24 January 2016].

Kagawa, R. C., Anglemyer, A. & Montagu, D. 2012. The Scale of Faith Based Organization Participation in Health Service Delivery in Developing Countries: Systemic Review and Meta-Analysis. *PloS ONE* 7**:** e48457.

Keen, J. & Packwood, T. 1995. Qualitative research: case study evaluation. *BMJ* 311**:** 444-446.

Kieny, M. P. & Dovlo, D. 2015. Beyond Ebola: a new agenda for resilient health systems. *The Lancet* 385**:** 91-92.

Komino, T. 2014. Community resilience. *The Ecumenical Review* 66**:** 324-329.

Kruk, M. E., Myers, M., Varpilah, S. T. & Dahn, B. T. 2015. What is a resilient health system? Lessons from Ebola. *The Lancet* 385**:** 1910-1912.

Kulig, J. C., Edge, D. S., Townshend, I., Lightfoot, N. & Reimer, W. 2013. Community resiliency: Emerging theoretical insights. *Journal of Community Psychology* 41**:** 758-775.

Lengnick-Hall, C. A. & Beck, T. E. 2005. Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management* 31**:** 738-757.

Maresso, A., Wismar, M., Greer, S. & Palm, W. 2013. What makes health systems resilient and innovative? Voices from Europe. *Eurohealth* 19**:** 3-6.

Maurice, J. 2015. Faith-based organisations bolster health care in Rwanda. *The Lancet* 386**:** 123-124.

McGilvray, J. 1981. *The Quest for Health and Wholeness.* Tübingen: German Institute for Medical Mission.

McKenzie, A., Abdulwahab, A., Sokpo, E. & W Mecaskey, J. 2015. *Building a Resilient Health System: Lessons from Northern Nigeria.* Brighton: Institute of Development Studies.

Olivier, J., Tsimpo, C., Gemignani, R., Shojo, M., Coulombe, H., Dimmock, F., Nguyen, M. C., Hines, H., Mills, E. J., Dieleman, J. L., Haakenstad, A. & Wodon, Q. 2015. Understanding the roles of faith-based health-care providers in Africa: review of the evidence with a focus on magnitude, reach, cost, and satisfaction. *Lancet* 386**:** 1765-1775.

Palmer, N. 2006. *Non-state providers of Health Services.* London: Department for International Development (DFID).

Robson, C. 2002. *Real world research: a resource for social scientists and practitioner.* 2nd Edition. Hoboken: John Wiley and Sons.

Schmid, B., Thomas, E., Olivier, J. & Cochrane, J. 2008. *The contribution of religious entities to health in sub-Saharan Africa. Study commissioned by Bill & Melinda Gates Foundation. Unpublished Report.* ARHAP.

Tomkins, A., Duff, J., Fitzgibbon, A., Karam, A., Mills, E. J., Munnings, K., Smith, S., Seshadri, S. R., Steinberg, A. & Vitillo, R. 2015. Controversies in faith and health care. *The Lancet* 386**:** 1776-1785.

United Nations. 2016. *Sustainable Development Goals* [Online]. Available: https://sustainabledevelopment.un.org/?menu=1300 [Accessed 24 January 2016].

Vogel, J. P., Betrán, A. P., Widmer, M., Souza, J. P., Gülmezoglu, A. M., Seuc, A., Torloni, M. R., Mengestu, T. K. & Merialdi, M. 2012. Role of faith-based and nongovernment organizations in the provision of obstetric services in 3 African countries. *American Journal of Obstetrics and Gynecology* 207**:** 495.e1-495.e7.

Walker, D., Champion, C., Hossain, S., Wahed, T., Gazi, R., Koehlmoos, T., Asiimwe, C., Ranson, M. & Bennett, S. 2013. *Establishing non-state sector research priorities in developing countries using a participatory methodology.* Geneva: Alliance for Health Policy and Systems Research.

Wodon, Q., Olivier, J., Tsimpo, C. & Nguyen, M. C. 2014. Market share of faith-inspired health care providers in Africa. *The Review of Faith & International Affairs* 12**:** 8-20.

World Health Organization. 2014a. *High level meeting on building resilient systems for health in Ebola-affected countries.* Geneva: World Health Organization.

World Health Organization. 2014b. *The role of non-state providers in strengthening health systems towards Universal Health Coverage (UHC): Call for Proposals* [Online]. Available: www.who.int/alliance-hpsr/UHC_2014.pdf [Accessed 3 October 2016].

Yin, R. K. 2009. *Case study research: Design and Methods.* 5th Edition. London: SAGE Publications Ltd

Part B: Literature Review

Health systems resilience and non-state, faith-based health providers in Africa: A scoping review

Introduction

The concept of 'health systems resilience' is an emerging issue in health policy and systems research (HPSR). In the available literature resilience of health systems is currently often defined as the ability to produce good health outcomes over time, including during periods of short-lived and intense shocks and crises, and during routine times when a health system faces ongoing stressors (see Kieny and Dovlo 2015; Kruk et al. 2015). The World Health Organisation (WHO) defines resilience as the "the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions" (World Health Organization 2017a). The WHO has called for a focused effort on building resilient health systems, and its importance was further cemented with the topic chosen as the theme for the 2016 Health Systems Global Symposium on HPSR (2016) (World Health Organization 2014a; Health Systems Global 2015).

The focus on health systems resilience emerged with the acknowledgement that health systems are vulnerable to shocks or stressors that threaten its ability to produce good health outcomes for the general population. Shocks can be defined as "sudden events that

affect the vulnerability of a system and its components" (Department for international Development, DFID 2011), while stressors are "long-term trends that undermine the potential of a given system or process and increase the vulnerability of actors within it" (DFID 2011). These shocks are usually understood to range from social or political conflict, natural disasters and short-term health epidemics to ongoing or chronic stressors such as health workforce shortages and severe financial constraints, which affect the ability of people to access health services. For example, the Ebola outbreak that began in West Africa in 2013 led to health centre closures which contributed to decreasing the number of people accessing maternal and child health services such as routine vaccinations and antenatal care (Wright et al. 2015). Meanwhile, ongoing natural disasters, such as in the Philippines, damage critical health infrastructure that prevents access to care. Typhoon Haiyan in 2013 damaged 600 health facilities and required the re-building of multiple health programs (McPherson et al. 2015). Stressors could include severe financial constraints and health workforce shortages also affect the ability of populations to access health services, leaving large segments of the population underserved. Management responses to shocks and stressors are likely to impact health systems differently and would therefore need varying management responses (International Federation of Red Cross and Red Crescent Societies 2012).

Both shocks and chronic stressors have the ability to unravel any gains made in health systems strengthening, as their consequences can leave a system in the same state as before, or worse off than before, or could lead to the collapse of the system entirely. However, in some instances where a system is resilient, shocks and stressors could actually lead to system improvements – for example when additional resources are brought into the

system as a result of the shock, as is said to be the case in the Ebola-affected systems (DFID 2011; Shoman et al. 2017). Despite the intensifying focus on health systems resilience, limited information exists on how resilient health system are developed and the different elements that contribute to health systems resilience.

Along with the rise in the interest in health systems resilience is a renewed focus on partnership with non-state providers (NSPs) to complement national health systems. NSPs include a wide range of actors, from non-governmental organisations (NGOs), private for-profit companies, pharmacies and faith and community-based organisations (Batley and Mcloughlin 2009; Palmer 2006). Although much investment has been made in boosting national health systems, there is a growing recognition that NSPs remain a relevant provider of services including primary healthcare in LMICs (Batley and Mcloughlin 2009). Limited information exists to date on the role, or the contribution, of NSPs to supporting the resilience of national health systems. In this scoping literature review we therefore seek to understand the contribution of NSPs, with a specific focus on non-state, faith-based health providers (FBHP)[1] to the resilience of national health systems, as FBHPs are prominent actors in African health systems (Olivier et al. 2015).

Review method

A scoping review was conducted to explore the intersection of the literature on health systems resilience, with the literature on the presence and contribution of FBHPs to national health systems. An iterative approach to searching the available literature was utilized, as

[1] In this review, FBHPs refer to non-profit, faith-inspired organizations that offer facility-based and other health services.

the topic of FBHPs contribution to resilience is largely unexplored. The review sought to map key concepts in the multidisciplinary resilience literature, and the available literature on health systems resilience and FBHPs, with the intent of understanding where the concepts from the various topics overlapped. As this is a fairly new topic area, a wide net was cast for the review in order to identify the relevant literature that may relate to health systems resilience and the aforementioned topics.

The literature search included a search for empirical and theoretical articles and books, and grey literature. Several databases were searched within EBSCO, including Academic Search Premier, Business Source Premier, Africa-wide information, CINAHL, e-Book Collection (on EBSCO Host), MEDLINE, SocINDEX with Full Text, PsycInfo and Pubmed. The initial search utilised multiple combinations of the terms: health system, resilience, faith-based organisation, faith-inspired organisation, mission hospital, Africa, developing country, or low and middle income country (LMIC).

Literature on resilience and its characteristics was assessed across several different disciplinary areas, with a specific focus on resilience relating to complex adaptive systems (CAS), as this was deemed more relevant for health systems. This was followed by a search of the literature on health systems resilience and NSPs, and FBHPs, which included grey literature received from topic experts, primarily the thesis supervisor. The search was focused on information related to LMICs, with a focus on Africa. Some literature from high income countries (HICs) was included in cases where information was limited or Africa, particularly in the review of the concept of resilience. Most of the literature on resilience and health systems resilience was published in the last 15 years. However, with the

literature on FBHPs, we went as far back as the 1980s in order to better understand the history and the nature of the role of FBHPs in health systems, both in the past and in the present, with the understanding that resilience is a system property that develops over time (Kulig et al. 2013). The literature searched was primarily English-language literature – although some French literature was considered.

In total, 115 documents were reviewed, which included 82 published articles and books or book chapters, and 33 grey literature. Fifteen (15) documents were on resilience in general, 18 were on health systems resilience, 69 on FBHPs, and 12 on NSPs. Only one document was found that explicitly discussed both FBHPs and general resilience, and no documents were found that discussed both FBHPs and resilience with regards to health systems.

Understanding the concept of resilience

The term 'resilience' has been studied in various disciplines outside of public health, ranging from physics to biology and psychology, as well as to environmental change and disaster risk reduction. In physics, resilience is defined as the ability to absorb shock and retain its original form, in biology it is the ability of the ecosystem to resist damage and recover, while in psychology it is the ability of the individual to deal with high levels of stress then resume life thereafter (Maresso et al. 2013). In organisational studies, resilience is the ability of a firm to adapt to changes in their environment and develop collective behaviours and responses in absorb and respond to these changes (Lengnick-Hall and Beck 2005; Maresso et al. 2013). Resilience from these perspectives could therefore be defined as the ability of a person, object or system to return quickly to a previous state of equilibrium prior the disturbance in their environment. These definitions which relate to a system returning to its

original state, with a focus on efficiency, constancy, and predictability could also be termed 'resilience engineering' (Holling 1996; Folke 2006; Woods 2006).

Another set of perspectives that diverges from engineering resilience is ecological resilience, first introduced by Crawford Stanley Holling in 1973 (Davoudi et al. 2012). Within the literature on socio-ecological systems (SES), resilience is defined as a system having the ability to move beyond recovery to the original state of equilibrium, towards re-organisation or transformation after a disturbance (Davoudi et al. 2012). In these systems, there is a recognition of the non-linear nature of development and change, and unpredictability of systems (Holling 1996). As such, multiple states of equilibrium exist instead of one equilibrium that must be returned to after a disturbance (Davoudi et al. 2012; Folke 2006; Holling 1996; Lengnick-Hall and Beck 2005). In fact, as the environment and the system is constantly changing, and influenced by forces at multiple levels and across time and space, it is argued that the system cannot remain as it was before a disturbance (Lengnick-Hall and Beck 2005; Woods 2006; Folke 2006). Instead, disturbance in the form of a shock or stress could present an opportunity to transform the system and to develop new capabilities. Legnick-Hall and Beck (2005) name this response to disturbance 'robust transformation', while other scholars in the socio-ecological, organisational management, community resilience and disaster risk reduction disciplines view this ability to adapt and learn from disturbance as their primary interpretation of resilience (see Cutter et al. 2008; Folke 2006; Woods 2006). An integral part of this definition of resilience are ongoing *feedback loops* that act as the memory of the system, which consistently feeds into and informs the behaviour of a system or its conditions, sometimes called the 'back loop' (Cutter et al. 2008; Folke 2006). This conceptualization of resilience appears more aligned with the definition of

complex adaptive systems (CAS) as systems that evolve over time, adapt, and self-organises. Resilience in CAS thus involves consistent learning over time and development of new capacities to deal with future disturbances, which emerges based on the various components of the system and from the disturbances faced by the system (Cutter et al. 2008; Folke 2006; Lengnick-Hall and Beck 2005). This concept of adaptability is thus critical, and even beyond adaptability is the importance of *transformation* - the ability of actors in the system to create a new system or change into a different one if the current system is no longer appropriate for the context (Folke 2006; Woods 2006). Reactions to system disturbance also influence the new conditions of a system, known as 'antecedent behaviours' (Cutter et al. 2008). Resilience in CAS is therefore a dynamic process that is consistently evolving, and has influences from different levels of the system. Some argue that resilience is not something that is created or inserted in a system, but is a property of a system or an outcome that emerges in response to a disturbance (Dahlberg 2015; Nemeth et al. 2008), however it is also argued that building resilience is a process (International Federation of Red Cross and Red Crescent Societies 2012). It is likely that one can work on building resilience, for example through working with system actors to build their capacity to be flexible and adapt in the face of change (Davoudi et al. 2012), however it is likely only after a disturbance that one can see whether a system is in fact resilient.

Holling (1996) argues that differentiating between engineering and ecological resilience is important in studying resilience. This is because understanding, evaluating, and managing for change varies depending on how one defines resilience (Holling 1996). Engineering resilience is based on "maintaining efficiency of function" and can be assessed to see how quickly it returns to the same state as before, while SES resilience aims to "maintain

existence of function" and should be measured through how well the system does this (Holling 1996).

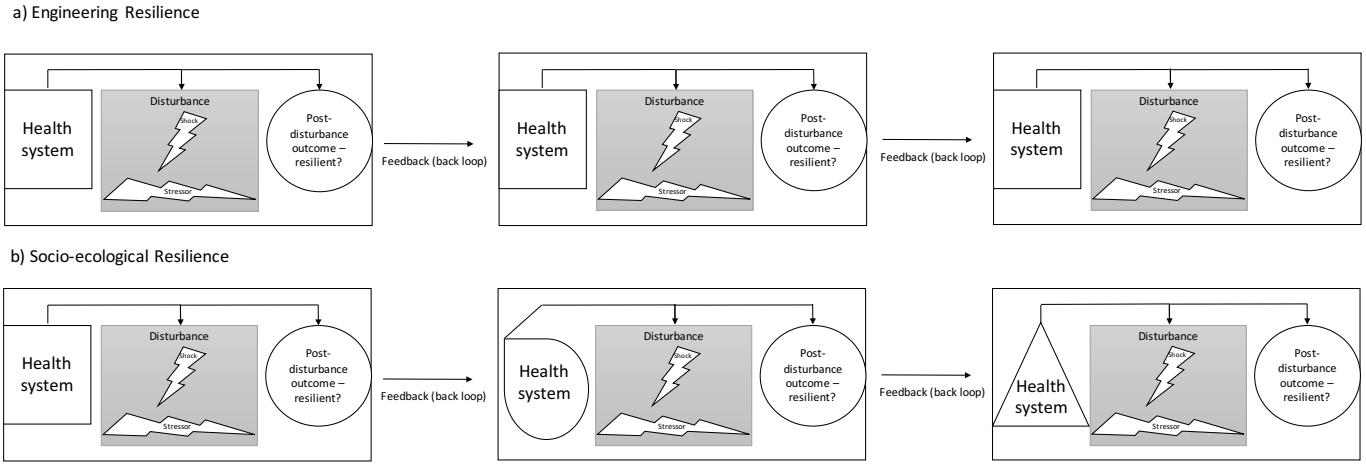

Figure 1: Diagram depicting the difference between engineering and socioecological resilience

Figure 1 presents a simplified distinction between these two definitions using health systems as an example of a system that experiences a disturbance. Each rectangle represents an event where the system experiences a disturbance, connected by feedback loops that inform the configuration of the resulting system. In engineering resilience, the health system goes back to the same state after each disturbance, and in SES resilience, the state of the system changes (or has potential to change) after each disturbance.

Measuring resilience

As a result of the dynamic process of change, measurement of resilience and empirical research on resilience of CAS is difficult. Woods (2006) argues that resilience can be measured based on how a system adapts, yet this adaptation could take decades to show and would require the measurement of changes over a long period of time, which

researchers are not always apt to do (Folke 2006; Kulig et al. 2013). Another challenge with measuring resilience is the difficulty of clearly delineating the multi-dimensional variables that make the foundation of resilience (Cutter et al. 2008). Resilience and the variables that contribute to it or the outcomes that come from resilience are not always distinct from each other; it is not always possible to distinguish if the different variables proposed as *sources* of resilience, or if they are *associated, necessary, or sufficient* conditions for resilience (Kulig et al. 2013). Furthermore, sources of resilience are dynamic and change over time; what makes one resilient now may not make it resilient to another challenge faced in the long term (Folke et al. 2010; Holling 1996; Woods 2006). Compounding the challenge are the often varying definitions of resilience, with some authors *placing adaptive capacity contributing to resilience* (Folke 2006), while others see resilience as adaptive capacity, or resilience and adaptive capacities nested in overall vulnerabilities of the system (Cutter et al. 2008). The nature of resilience particularly in CAS, with ongoing feedback loops among the system variables and multiple influences from various level, make it an almost impossible task to separate the different parts from each other as they all influence each other. As a result, it is not clearly understood what leads to resilience in CAS or in SES (Cutter et al. 2008; Kulig et al. 2013).

Sources of resilience

Despite there not being a simple way to measure resilience in CAS, several authors have posited key factors deemed as sources of resilience. For example, 'adaptive capacities' are commonly deemed as a key source of resilience. This is defined as the capacities of actors in a system to absorb, tolerate, and moderate a disturbance in order to cope and lead to change, or simply put, the capacity to deal with a disturbance (see Cutter et al. 2008; DFID

2011; Folke 2006; Folke et al. 2010). Adaptive capacities are presented as both a source and a consequence of resilience as they can develop after a disturbance to influence antecedent behaviours (Cutter et al. 2008; Folke 2006).

A pool of assets to draw from is also perceived to be important for resilience, which can be physical, environmental, political, biological, psychosocial, and cultural resources (DFID 2011; Ager et al. 2013). The importance of social capital is a consistent theme in the literature, which stems from consistent interactions over time to build trust (Folke 2006; Kulig et al. 2013; Lengnick-Hall and Beck 2005). This social capital, which also includes broad resource networks, can be drawn on during times of disturbances and provide opportunities for resource exchange, access to additional information, a deep commitment to a common purpose, and diversity to respond to a disturbance (Lengnick-Hall and Beck 2005). This claim is further supported by Baser and Morgan (2008) in their 16 case studies of organisations across four continents, which found that the most resilient were those that had developed a strong sense of purpose and commitment among their staff, and the existence of redundancies such as partners or allies to reach out to in times of need. Although in these case studies resilience was defined more as engineering resilience instead of resilience in CAS, it is one of few empirical works that demonstrate some of the key sources of resilience for organisations.

Finally, the issue of adaptive governance has been mentioned as an important for resilience, which includes different components such as understanding the system dynamics, management practices that are able to interpret and respond to feedback and learn, building adaptive capacity, and supporting both social networks and flexible institutions on

governance at various levels of the system (Folke 2006). Thus, although there are challenges with measuring resilience and delineating the variables that contribute to resilience, there factors outlined above are proposed to create trajectories for resilience in response to disturbance.

Health systems resilience

In recent years the interest in health systems resilience has emerged due to the recognition that health systems are vulnerable to shocks and stressors. The lens of resilience is a fairly new framing – and a relatively new area of research in the study of health systems. The literature search unearthed many articles on resilience at the micro or individual level (with regards to patients in care), however, less on 'whole health systems resilience'. Some older literature is available at the meso level on the resilience of organisations and the factors that support the resilience of hospitals (Baser and Morgan 2008; Spake and Thompson 2013; Nemeth et al. 2008). Research on 'everyday' resilience (to stressors) at the meso and micro-level has also been conducted (see RESYST 2017). However, empirical data and information on resilience of whole systems appear limited. Literature on the resilience of entire national health systems appears to have mainly emerged in the period from 2010 to 2016. The focus on resilience in the European Union mainly began after the financial crisis of 2008 (European Commission 2014). Globally, the discourse on resilience was amplified since 2014 during response to the West Africa Ebola epidemic and has since been on the global health agenda.

> *"The fragility of health systems has never been of greater interest—or importance—than at this moment, in the aftermath of the worst Ebola virus disease epidemic to*

> *date. The loss of life, massive social disruption, and collapse of even the most basic health-care services shows what happens when a crisis hits and health systems are not prepared."* (Kruk et al. 2015)

The distinction between engineering and SES resilience can be applied to understand which definition could be more appropriate. Applying an engineering resilience definition means that after a disturbance a health system bounces back to the same state as before and can be measured by how quickly it does so. From the SES definition, resilience is assessed by whether the health system is able to maintain its function (or intended outcome), regardless of the health system ends up in a different state or different configuration after a disturbance. This varying understanding of the resilience concept could be one of the reasons behind the debates on the value of resilient health systems (Topp et al. 2016). If one defines health systems resilience from the engineering perspective, then returning a dysfunctional health system to the same state that it was before a disturbance is unlikely to be beneficial, while if one defines it from the SES perspective the potential to reap benefits for health due to health system improvements exists. Given the health systems are commonly classified as CAS (De Savigny and Adam 2009), the framing of health systems from the SES definition appears to be a more appropriate approach – although the framing of resilience in health systems warrants further consideration.

As resilience is a relatively new focus and discourse in HPSR, there remains varied definitions of 'health system resilience'. Although resilience was the theme for the 4th HPSR Symposium in Vancouver, many participants acknowledged that the term resilience still requires further unpacking with regards to health systems (Health Systems Global 2016).

Both engineering and SES definitions appear to be applied in HPSR at the moment. As previously mentioned, the WHO defines resilience in the following way:

> *"…. the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions."* (World Health Organization 2017a)

This definition appears similar to the aforementioned engineering resilience, where a resilient health system is one that restores, or returns to, the same state as before. Others have pushed this definition further to reflect the nature of health systems as CAS, by including the element of continuous learning and transformation or re-organisation after a disturbance in addition to the ability to absorb shocks and continue functioning (Blanchet 2013; Kruk et al. 2015).

> *"Health system resilience can be defined as the capacity of health actors, institutions, and populations to prepare for and effectively respond to crises; maintain core functions when a crisis hits; and, informed by lessons learned during the crisis, reorganise if conditions require it."* (Kruk et al. 2015)

This continuous learning and adaptation that the health system undergoes has the possibility to set a health system on a trajectory for a resilient outcome post-disturbance. Similarly, Maresso et al. (2013) argue that the experience of coping with a stress or shock can pave the way for a better response in the face of a future disturbance. The literature

therefore shows that there remains further need to clarify what is meant by health systems resilience, although some common framing is emerging.

Characteristics and sources of health systems resilience

The *characteristics* of resilient health systems proposed in the literature are varied. Morrison and Waltner-Toews (2010) for example state that resilient health systems must be constantly 'evolving and self-organizing'; while others have stated that a resilient health system is one that is 'adaptable' (European Commission 2014; Maresso et al. 2013). Other characteristics of resilient health systems include the presence of diversity in the system (Kruk et al. 2015; Ager et al. 2013), flexibility (Morrison and Waltner-Toews 2010; Ager et al. 2013), and integration (Kruk et al. 2015; Morrison and Waltner-Toews 2010). In terms of a cohesive framework for health systems resilience, Kruk et al. (2015) provide the most cohesive proposal, stating that resilient health systems must have the following characteristics, be: diverse, integrated, self-regulating, aware, and adaptive.

Different *sources* of health systems resilience have been proposed. The importance of having a 'strong' health system is consistently emphasized, with an emphasis on primary health care (PHC) as the foundation of this strength (Kieny and Dovlo 2015). Based on the WHO health systems building blocks, this implies the necessity for strong service delivery, health workforce, information, leadership and governance, medical products, vaccines and technologies, and financing (World Health Organization 2017b). This emphasis on strengthening the health systems building blocks to support resilience is echoed by other authors who have also cited the importance of factors such as a strong health workforce (Kruk et al. 2015), good governance (Maresso et al. 2013), stable financing mechanisms

(European Commission 2014), and information systems (Kruk et al. 2015). Additionally, strong cross-sectoral coordination has also been proposed as a source of resilient health system (Morrison and Waltner-Toews 2010; World Health Organization 2014a). The concept of good governance includes various aspects, including a strong sub-national system, coordination, management (Kieny and Dovlo 2015), accountability (Kieny and Dovlo 2015; Maresso et al. 2013) and participation from communities (Maresso et al. 2013). This engagement with communities is also considered critical, as evidenced by the multiple times that social capital in one form or another was mentioned as key source of resilience (Kruk et al. 2015; Kieny and Dovlo 2015). These authors deemed that social capital was important not only with communities, but also with health workers to ensure that during a time of crises they remain committed to their work. In relation to social capital, another source of resilience is a strong sense of purpose or alignment of the values and goals of employees. The existence of redundancies or storage capacity is also deemed important for resilience (Kruk et al. 2015; Morrison and Waltner-Toews 2010). Last but not least, a key source of resilience are the adaptive capacities of actors in the health system (Blanchet 2013). There is therefore a myriad of factors are supposed to contribute to health systems resilience. The consolidated sources of health systems resilience and their sub-components, as proposed in the literature to date, is outlined in the Figure 2 below.

Upon examination of the characteristics of resilient health systems and sources of resilience, it appears that some of the concepts overlap. For example, some characteristics of resilient health systems (such as being diverse or adaptive) are also commonly understood as *sources* of health systems resilience. Figure 2 below depicts this overlap. (For the sake of simplifying the diagram, the health system figure appears to stay the same post-disturbance, however,

it is recognized that the state of the health system is likely to change after each disturbance).

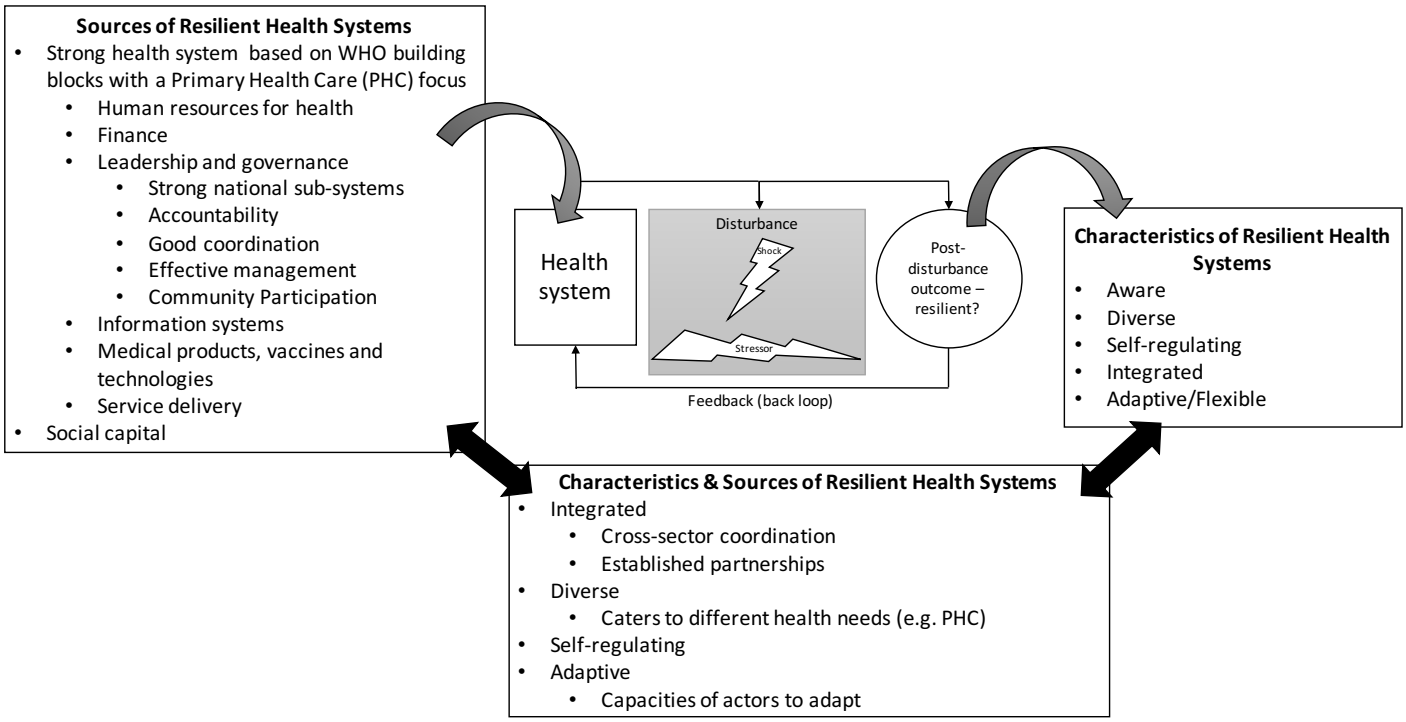

Figure 2: Diagram of overlapping resilience sources and characteristics (Source: Author)

This overlap is possibly a result of the concept of health system resilience still being poorly clarified within HPSR. However, it is also likely due to the nature of health systems as CAS with feedback loops that form the memory of the system and shape the antecedent behaviours or conditions of a health system. Therefore, characteristics of a health system, before or after a disturbance, could *also* be sources of resilience. That is, after a disturbance, the system will settle into a certain state, and the characteristics of this state, whether they are resilient or not, will influence the reaction of the system to a future disturbance, and so forth in an ongoing loop. Hence, the characteristics present in a health system could also be sources of resilience (or vulnerability if the characteristics are not

optimal to set the system on a trajectory for resilience). This relationship is captured in Figure 3 below.

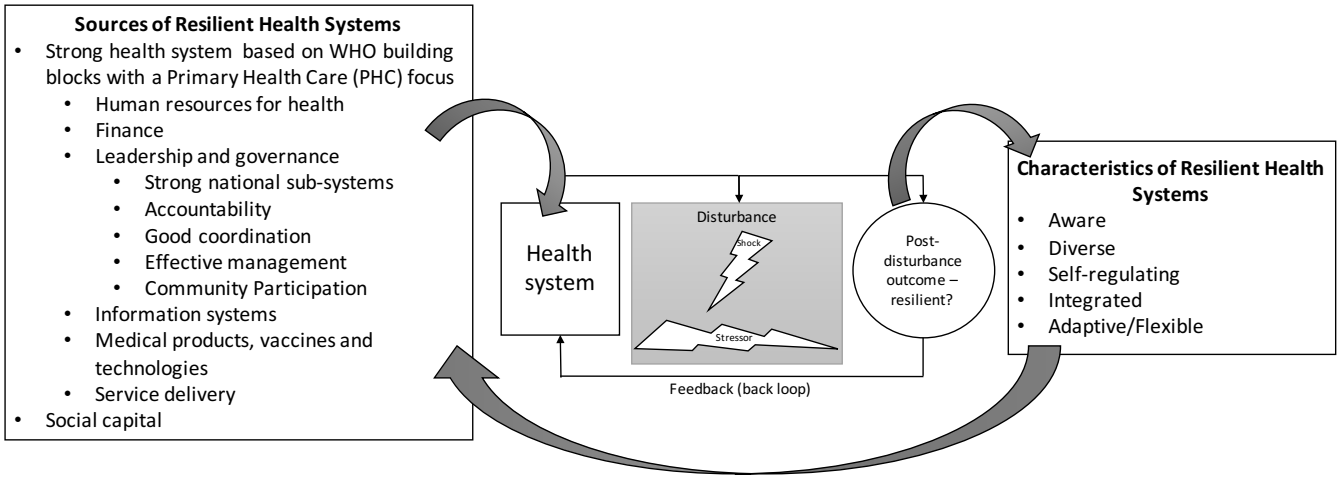

Figure 3: Diagram of the sources and characteristics of health systems resilience and the relationship between them (Source: Author).

Unfortunately, much of the literature currently available on health systems resilience are either grey literature, editorials and theoretical work, with limited empirical evidence available to demonstrate the validity of the propositions on the characteristics and sources of resilience.

Empirical evidence on what leads to resilience for health systems is limited, though Ager et al. (2015) and McKenzie et al. (2015) published recent studies in response to a shock in the form of insurgency in Northern Nigeria. The former found suggestions that pathways of adaptation for resilience emerged from the health system being aware, diverse, and self-regulating (Ager et al. 2015), while the latter makes a case for a strong health system based

on primary healthcare being a key foundation for resilience (McKenzie et al. 2015). Additionally, Kruk et al. (2015) were one of the few who established a clear outcome of a resilient health system, which is one that is able to protect health and continuously produce good health outcomes over time. However, it is still unclear however how to operationalize or measure this outcome. This difficulty in measuring health system resilience however is not uncommon and has been highlighted in the literature (Blanchet 2013, see above). The same challenges with measuring resilience in other fields applies to work on health systems resilience, such as the long-term observational requirements, and the difficulty in separating multiple variables and contextual factors. The other aspect of a resilient health system that makes it difficult to measure or assess is that it is an emergent property of a health system (Dahlberg 2015; Kruk et al. 2015; Kutzin and Sparkes 2016), meaning it cannot necessarily be something that is implemented in itself but an outcome that emerges based on various factors inherent in the system. In general, there needs to be more empirical research to better understand the critical characteristics or factors within health systems that could enable resilience to emerge.

Non-state, non-profit health providers and health systems resilience

One area of investigation in relation to resilience of national health systems that is virtually untouched is the contribution of NSPs to whole (national) system resilience. Despite massive investments in the public sector for health, NSPs have remained relevant partners in the health sector (despite some actors in the 1990s arguing that non-state non-profit providers would eventually disappear as public systems were strengthened (see Gilson et al. 1994). The partnership was encouraged in the 1980s and 1990s based on the recognition of governments that they are currently unable provide comprehensive health services

nationwide, and the simultaneous encouragement of the international community for partnership with NSPs as part of health sector reforms (Green et al. 2002; Rookes and Rookes 2012; Walker et al. 2013). The WHO has also encouraged partnerships as one of the ways to achieve universal health coverage (UHC, Ascroft et al. 2011). It was believed that the public and private sector could work together based on their distinct value-add or comparative advantage to the sector (Birungi et al. 2001). Since the 1980s to date, many partnerships were formed between the public and private sector. Some of the reasons included pooling scarce resources (Brinkerhoff and Brinkerhoff 2011; McLoughlin 2011), division of labour (presumably based on comparative advantages), and resource mobilization (Brinkerhoff and Brinkerhoff 2011). In 2014, the Alliance for Health Policy and Systems Research (AHPSR) called for additional research to understand the contribution of NSPs to health systems to better harness their potential to contribute to health systems strengthening (World Health Organization 2014b). Their relevance from the lens of resilience however has yet to be examined. The following section will thus review the perceived comparative advantages of NSPs, with a specific focus on non-state FBHPs, to determine how partnerships with these key health systems actors may contribute (or detract) from health systems resilience.

One of the key reasons for partnering with NSPs in Africa was their ability to extend the reach of national health systems. They were shown to supplement limited or unavailable government services; the examples in literature are numerous. In Uganda, the private sector grew when the public sector for health collapsed during the reign of the dictator Idi Amin in 1971, resulting in 79% of curative health services offered by the private sector by 2001 (Birungi et al. 2001). A similar experience of providing a buffer during a time of crisis was

had in Zaire (now the Democratic Republic of Congo), when the health system collapsed after decolonization from Belgium and was reported to be upheld by non-state, FBHPs (Ewert 1993), and similarly in Chad during the civil war (Boulenger and Criel 2012). These examples support the argument that having a mix of providers in the sector is advantageous as their reactions to conflict or instability vary (see Orach 2008).

NSPs are also seen as advantageous in supplementing limited government resources. In some cases, they have better infrastructure than government (Foster 2012; Gilson et al. 1997). In Malawi for example, partnerships existed with the private sector since the 1930s; although government was initially reluctant to accept them into the national health system, it was realized that the Malawian government simply could not fulfil their aim of improving population health – and thus partnerships were formed (Banda and Simukonda 1994). Faith-based health facilities also contributed to improving equity in access, as they were often in areas unserved by government (Banda and Simukonda 1994; Duff and Buckingham 2015; Lönnroth et al. 2004; Gilson et al. 1994). Although some authors contested that these partnerships improve equity (Jennings 2015), it has been widely shown that agreements with faith-based NSPs increased access in underserved areas, for example in Malawi (Chirwa et al. 2013). Other examples of NSPs supplementing gaps in the public health system can be found in Tanzania and Zimbabwe. In Tanzania, faith-based NSP hospitals were assigned the label of Designated District Hospitals (DDH) as they were the only hospital in certain areas of the country that could play this role (Gilson et al. 1997; Jennings 2015)[2]. At one point, non-profit NSPs were said to be providing 96% of health services in rural areas in Zimbabwe

[2] Today, it is fairly common for FBHP facilities to be designated as (and function as) district hospitals within the public system in several countries in Africa – such as Ghana, Uganda, Tanzania, Malawi, Kenya and Lesotho (see Olivier et al. 2015).

(Gilson et al. 1997). NSPs have also supported capacity development of health workers when human resources were weak.[3] Many training institutions created by NSPs have become more formalized over the years (Rookes 2009), and are now recognized by government (Adjei et al. 2009). In Ghana for example, there has been an established partnership between government and NSPs for training nurses since the late 1950s as the then newly independent Ghanaian government recognized their lack of skilled nurses (Schmid 2013). In South Africa, NSPs also supported the training of community-health workers (CHWs) (Van Pletzen et al. 2013).

There are however limits to the ability of NSPs to extend the reach of national health systems and supplement gaps in government service delivery. Some form of user fees is often imposed and relied on heavily by faith-based NSPs in Africa, driven in large part by their dwindling traditional sources of funding (Boulenger and Criel 2012; Gilson et al. 1994; Green et al. 2002; Rookes 2009; Rookes and Rookes 2012; Schmid et al. 2008; Ssengooba et al. 2002). This challenge limits access to health services especially among the poor, and contradicts the mission of faith-based NSPs to serve the poor and marginalized in society (Asante 1998; Gilson et al. 1994; Olivier et al. 2015). This becomes particularly problematic in instances when NSPs are assigned district hospital status or when they are the only facility available, as people have no choice but to pay fees at these hospitals (as opposed to publicly owned district hospitals where services are often provided free of charge) (Dambisya et al. 2014). Although some NSPs claim to provide exemptions for the poor, these mechanisms are not always applied (Ssengooba et al. 2002). Some attempts to mitigate the

[3] In all of the African countries in which there are significant FBHPs and non-profit NSPs present, there is a major human resource crisis.

effect of user fees on health service utilization have been made through government agreements, where NSPs provide free services for certain segments of the population or for certain illnesses in exchange for government funding, but the implementation of these agreements is not always optimal (Boulenger and Criel 2012; Chirwa et al. 2013). In some instances, NSPs continue to charge user fees because of failure of government to follow through on their financing agreements (Chirwa et al. 2013; Olivier et al. 2015) – a practice that decreases the intended goal of the government-NSP partnership to improve access to health services. NSPs have also tried to accommodate the poor by lowering the cost of their services, and by developing more tertiary services that can generate income; however, as with government partnerships, these approaches also come with their own set of challenges and have not always resulted in improving access for the poor (Rookes 2009).

Another challenge that hinders the ability of NSPs to extend services is the limited coordination that exists in some instances between NSPs and governments. Historically, faith-based NSPs operated in isolation and sometimes saw government partnerships as interference with their missions (Green et al. 2002; Schmid 2014); this often led to duplication of services and the creation of parallel systems for service delivery. At times, government saw NSPs as competitors for scarce resources, especially at the sub-national level (Asante 1998; Dimmock et al. 2012; Orach 2005; Schmid et al. 2008). NSPs, especially faith-based ones, have also been known to promote their own agenda (Green et al. 2002; Olivier et al. 2015), which have not always aligned with those of national governments. They saw health care as an entry point for evangelism and sometimes disregarded national health guidelines that contradicted with their religious values (Gilson et al. 1994; Green et al. 2002; McPake 2009; Olivier et al. 2015; Schmid 2014), such as services related to sexual and

reproductive health (Tomkins et al. 2015). This not only hindered coordination in the health system, but also limited the reach of certain services. Additionally, where poor coordination between government and NSP services existed, individuals could have difficulties accessing referral services (Schmid et al. 2008). This lack of coordination and varying ideas with regards to health care fostered suspicions on the side of both governments and NSPs, making partnerships sometimes challenging between these health system actors (Ager 2014; Benson and Jaquet 2014).

Attempts are being made to improve coordination between government and faith-based NSPs. Christian Health Association (CHA) platforms were developed from the 1960s onwards to improve coordination with government, and to alleviate the financial hardship faced by NSPs (see Dimmock et al. 2012; Schmid 2014); however, further work is needed for NSPs to more tightly align with government (Aylward 2012). For example, as NSPs become more heavily reliant on funding from donors that often fund vertical disease programs, their activities sometimes disproportionately favour certain diseases over others, creating inequities in the health services offered and parallel structures that are not always aligned with government (Boulenger and Criel 2012; Orach 2005). The story of the ability of NSPs to extend health services is thus variable, with some of their activities and roles contributing to extending service delivery, while others detract from it.

Another perceived comparative advantage of NSPs is their superior governance in comparison to the public sector. There is a perception that NSPs are better and more efficiently managed (Banda and Simukonda 1994; Birungi et al. 2001; Brinkerhoff and Brinkerhoff 2011; McLoughlin 2011), are less likely to abuse available resources (Gilson et al.

1997), and are more accountable (McLoughlin 2011) – though these points are also contested as NSPs often have multiple accountabilities that undermine overall accountability (Gilson et al. 1997). In Nigeria for example, one study found that mechanisms to hold faith-based NSPs accountable were lacking and these organisations were not always more accountable (Olarinmoye 2014).

NSPs that are faith-based also claim to have a strong focus on community and on primary health care (PHC), which can result in strong social capital. According to the literature however, many NSPs still focus on hospital-based, curative services and more specialized services funded by donors (Appiah 2013; Adjei et al. 2009; Ewert 1993; Green et al. 2002 Olivier et al. 2015). Regardless of their tertiary or community focus, NSPs in many cases are rooted in, and in fact, owned by local community. Many have been based in communities for decades, with a focus on grassroots care (Ascroft et al. 2011; Duff and Buckingham 2015). In some instances (it is argued), they have a stronger presence than government (Ascroft et al. 2011), and have built strong networks and close relationships in communities, especially among the marginalized populations they often serve (Ascroft et al. 2011; Duff and Buckingham 2015; Gilson et al. 1994; McLoughlin 2011; Van Pletzen et al. 2013). Possibly as a result of this strong social capital, communities are said to see NSPs as being more trustworthy, and have strong influence which could be utilized for social mobilization, collective action, and public engagement (Brinkerhoff and Brinkerhoff 2011; Duff and Buckingham 2015; Van Pletzen et al. 2013). This comparative advantage was instrumental for example in the recent Ebola outbreak in West Africa (2013-2016), where faith-based NSPs were a key entry point for engaging with communities about the virus and to curb transmission (Greyling et al. 2016). NSPs have also often played critical roles in advocating

on behalf of communities, as in the case of South Africa during the HIV/AIDS epidemic (Duff and Buckingham 2015; Van Pletzen et al. 2013).

There has been international and local pressure to formalise the role of NSPs through contracting processes in the last few decades. In the literature, there are claims that the private sector generally is generally more efficient once contracted by government because contracting exposes health facilities exposed to competitive pressures (Chirwa et al. 2013), and the contracts themselves could encourage more efficient management (Gilson et al. 1997). A study across three countries supported the claim of increased efficiencies, with hospitals operated by NSPs showing lower costs for certain services (Gilson et al. 1997). Some evidence of better quality services was also found in this study, with more drugs available at NSP facilities and better infrastructure, though it was posited that these improvements in quality are a result of their access to more resources from external funding (Gilson et al. 1997). Others also claim that the quality of care may come from the commitment of the health workers themselves, especially in faith-based NSPs (McLoughlin 2011). The perception of better management and efficiency came as a result of more autonomy and flexibility (Gilson et al. 1997), another perceived comparative advantage of NSPs.

The idea that NSPs are thought to be more flexible and responsive is important - as it hints at their adaptability (in reference to the discussion on resilience above). In theory, non-profit NSPs are not as heavily burdened by bureaucracy (as public system service providers are), and are thus possibly more flexible and can be responsive to the needs of their target communities (Brinkerhoff and Brinkerhoff 2011; Ewert 1993; Gilson et al. 1994). For

example, they may be better able to respond to disasters or emergencies as a result of their flexibility (Birungi et al. 2001). One of the key reasons for their potentially greater flexibility is their diversified funding sources, as it is often stated that NSPs have more and more varied external funding partners (Haakenstad et al. 2015). However, it must be noted that this flexibility is dependent on management autonomy and effectiveness (Gilson et al. 1997); for example, they can only be more efficiently managed and effective if they have freedom to re-allocate budget and to hire or fire staff (Gilson et al. 1997). This flexibility also allows them to innovate on service provision and financing (Gilson et al. 1994; McLoughlin 2011).

In recent years however, the precarious financial situation of NSPs has increased their reliance on government for financial support and donor funding (Asante 1998; Chand and Patterson 2007; Haakenstad et al. 2015; Rookes 2009; Rookes and Rookes 2012). This makes NSP's programs vulnerable to shifts in government and donor priorities (Chand and Patterson 2007; Haakenstad et al. 2015) and less responsive to communities as their focus may shift to being responsive to the donor, or the 'bottom line' (Gilson et al. 1997). For example, as noted earlier, some non-profit NSPs have followed international trends and shifted towards vertical programming, which is contrary to their previous focus on integrated community-based care (Appiah 2013; Gilson et al. 1997; Gilson et al. 1994). This also has implications for equity, where resources are at risk of over-allocation to certain diseases, as has been shown with funding for HIV/AIDS (Boulenger and Criel 2012). Overall, this trend in donor funding of vertical programs works against supporting systems strengthening (Foster 2012), and also detracts from national health systems resilience.

NSPs thus appear to have been beneficial in several ways for health systems resilience by virtue of their operations and the nature of their work. This contribution however is not absolute and varies, with NSPs at times detracting from the overall resilience of national health systems. Their ability to extend the arm of government for service delivery in times of shock such as with political instability or conflict, or to supplement government assets in terms of human resources or infrastructure in times of stressors, could be seen as supporting the development of sources of resilience - but there are some limits to their ability to extend health services. Their possible comparative advantage in governance and management, their flexibility, and their social capital could have also contributed to building up sources of resilience, but much of this was tied to their historical access to more funding which in the last few decades have now dwindled. Finally, the fact that NSPs are in the system diversifies the mix of actors, a characteristic proposed to lead to resilience (as discussed earlier).

The sources and characteristics of resilience where NSPs have likely contributed are captured in italics in Figure 4 below, mapped against the proposed characteristics and sources of health systems resilience. The diagram also attempts to capture the variations in NSP influence on resilience, as literature has shown that in some instances their presence also detracts from resilience. Therefore, '+' and '–' signs have been included in the diagram to show where NSPs contribute (+) and detract (-) from specific components of health systems resilience.

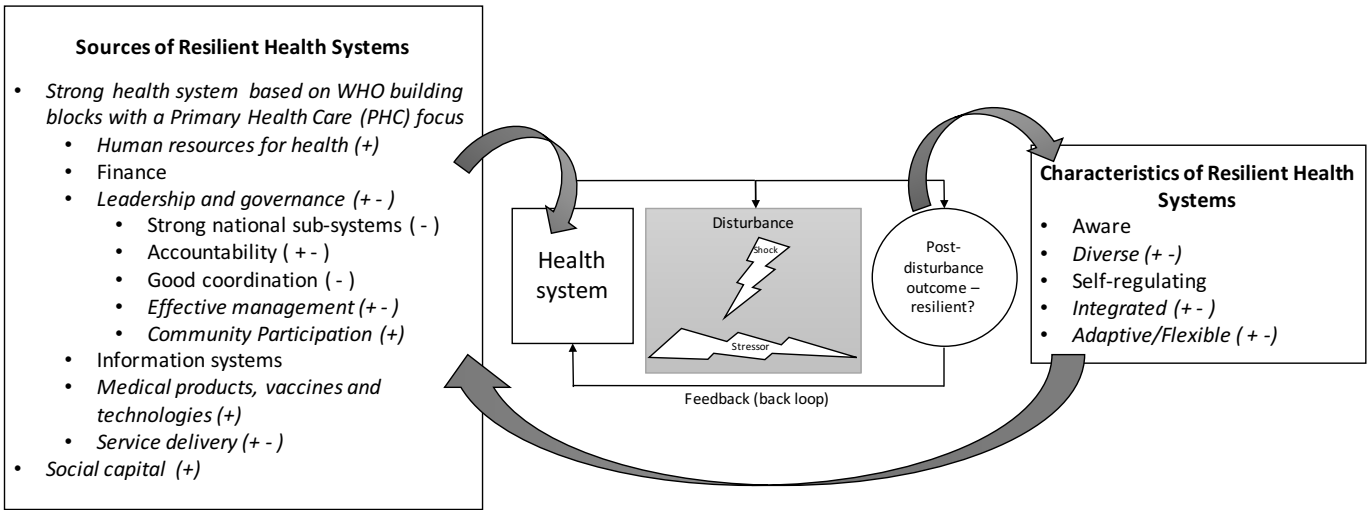

Figure 4: NSPs mapped against sources and characteristics of health systems resilience proposed in literature (Source: Author)

One further change in the nature and position of the structure and operations of many faith-based NSPs in Africa that may be lessening or changing the contributions to resilience is increasing integration with governments. As previously mentioned, there has been a general trend towards the integration of faith-based NSPs into national health systems (see Duff and Buckingham 2015; Olivier et al. 2015) as faith-based NSPs sought more stable financing and as governments in Africa acknowledged their important contribution to service delivery (Rookes 2009). This move has possibly made them vulnerable to the same shocks and stressors as the public sector, which could detract from one of their contributions of extending government service delivery. Service level agreements (SLAs) and memorandums of understanding (MoUs) have become common, where government provides funding for the operations, infrastructure or the staffing of NSPs (Adjei et al. 2009; Gilson et al. 1997).

Although there is much benefit into bringing NSPs into the government machinery and in fact it has been argued that integration leads to resilience (see above), this interdependence

likely leaves NSPs vulnerable to the effects of public sector weaknesses. Several cases have occurred where government failed to follow-through on their funding responsibilities, as in Malawi (Chirwa et al. 2013) and Tanzania (Boulenger and Criel 2012; Gilson et al. 1997; Gilson et al. 1994), contradicting the promise of more stable funding that this partnership was seen to offer. As previously mentioned, this has led some faith-based NSPs to maintain user fees despite an agreement with government not to, reducing access to services for the poor (Chirwa et al. 2013). The buffer previously provided by these facilities is thus put at risk through their close linkage with the public sector. In essence, this integration has reduced the diversity in the national health system.

Though NSPs benefit from the financial transfers that often come with government partnership, partnership may also lead to the loss of flexibility, responsiveness, and better governance. This loss in autonomy was also highlighted as a potential pitfall when PPPs are established (Ascroft et al. 2011; McLoughlin 2011), depending on how the contracts are written (Gilson et al. 1997). If the contracts are too strict, the ability to re-allocate budget to remain responsive, or to have cost-savings or better performance management of employees may be lost. As Ascroft et al. (2011) and Gilson et al. (1997) pointed out, contracting and PPPs are only advantageous if autonomy is maintained so that NSPs are able to live up to their comparative advantage which prompted the partnership in the first place.

Two interlinked challenges to resilience with the move towards government integration is the loss of identity of NSPs, which could also erode their social capital. NSPs that receive significant funding from government are often seen as part of the public sector (Ascroft et

al. 2011). In fact, this loss of identity was one of the main concerns of the private sector in Uganda when their integration into the health system was under negotiation (Birungi et al. 2001). This loss of identity might decrease their effectiveness (McLoughlin 2011) and make the reasons for entering into partnership moot (Brinkerhoff 2003). They would be unable to play critical roles such as social mobilization during emergencies – especially in areas where government is not trusted. This potential for loss of trust from constituents/downward accountability after government partnership was also highlighted by Gilson et al. (1997) and McLoughlin (2011). Another advantage that will be lost is their ability to play an advocacy role for communities – or their civil or community accountability (Brinkerhoff and Brinkerhoff 2011; Van Pletzen et al. 2013). These changes could erode health systems resilience, and also delay or prevent necessary transformation, as advocacy efforts could lead to much needed system change for the better.

Another change that could potentially lead to the loss of resilience is the growing reliance of NSPs on project funding. In instances where government funding is unavailable or insufficient, NSPs are turning towards project-based funding from bilateral or multilateral donors, making programs vulnerable to shifts in government and donor priorities (Chand and Patterson 2007; Haakenstad et al. 2015) and less responsive to communities, as their focus may shift to being responsive to the donor, or the 'bottom line' (Gilson et al. 1997). For example, some non-profit NSPs have started to move towards more vertical programs, which is contrary to their previous focus on community-based care (Appiah 2013; Gilson et al. 1997; Gilson et al. 1994). This also has implications for equity, where resources are at risk of over-allocation to certain diseases, as has been shown with funding for HIV/AIDS (Boulenger and Criel 2012). Overall, this trend in donor funding of vertical programs works

against supporting systems strengthening (Foster 2012), and also detracts from resilience building.

Conclusion

This review suggests that *faith-based* NSPs could be particularly (or specifically) beneficial to the resilience of national health systems. Their presence diversifies the actors within a health system, and their ability to support service delivery appear key to providing a buffer for weak public health systems. Further, their perceived comparative advantages of better governance, their flexibility and responsiveness, and their established social capital with communities are also characteristics that are *potentially* supportive of health systems resilience. This contribution is not cross-cutting, however, and in some cases, faith-based NSPs also detract from health systems resilience. Specifically, there are limits to their ability to extend health services, there are still gaps in their coordination with national health systems, and there are possible challenges with equity as they often continue to charge user fees and as they rely more heavily on donor funds that prioritize vertical disease programs.

In recent years, the nature of NSPs and their role in the health system have also changed, which also detracts from their contributions to resilience. Increased integration with the public sector means they are vulnerable to the same pitfalls and disturbances as public providers, and may not be able to play the buffering role they played in the past. Contracting with government (and with donors) could lead to less flexibility and responsiveness, and in turn make NSPs less efficient and more poorly managed. Another critical challenge is the loss of identity of NSPs, and in turn, their potential loss of trust among their constituents, thus lessening social capital. Further, NSPs that are more

integrated may no longer be able to play their critical advocacy role, which has potential to transform health systems for the better.

It therefore may be the case therefore that health systems are now more resilient because there is more cross-sectoral collaboration between the public and private sector (though further work can be done to strengthen this collaboration). However, without the right specifications or conditions in the partnership, these interdependencies could also lead to brittle or less resilient heath systems. Further research is thus warranted to confirm whether the proposed contributions of faith-based NSPs documented in literature actually hold true, by examining specific cases of countries facing health system shocks and the role of faith-based, NSPs in these contexts.

References

Adjei, G., Everd, M., Dokotala, T., Kahabi, J., Isaac, M., Pamba, P. & Pearl, E. 2009. *Quest for Quality. Interventions to Improve Human Resources for Health among Faith-Based Organisations.* Amsterdam: Royal Tropical Institute (KIT).

Ager, A., Annan, J. & Panter-Brick, C. 2013. *Resilience: From conceptualization to effective intervention. Policy Brief for Humanitarian and Development Agencies.* New York: International Rescue Committee.

Ager, A. K., Lembani, M., Mohammed, A., Ashir, G. M., Abdulwahab, A., Pinho, H., Delobelle, P. & Zarowsky, C. 2015. Health service resilience in Yobe state, Nigeria in the context of the Boko Haram insurgency: a systems dynamics analysis using group model building. *Conflict and Health* 9**:** 1-14.

Appiah, B. 2013. Handle with (faith-based) care. *Canadian Medical Association Journal* 185**:** E219-E220.

Ascroft, J., Sweeney, R., Samei, M., Semos, I. & Morgan, C. 2011. *Strengthening church and government partnerships for primary health care delivery in Papua New Guinea: Lessons from the international experience.* Melbourne: The Nossal Institute for Global Health.

Banda, E. E. N. & Simukonda, H. P. 1994. The public/private mix in the health care system in Malawi. *Health Policy and Planning* 9**:** 63-71.

Baser, H. & Morgan, P. 2008. *Capacity, change and performance: Study report.* Maastricht: European Centre for Development Policy Management

Batley, R. & Mcloughlin, C. 2009. *State capacity and non-state service provision in fragile and conflict-affected states.* Birmingham: Governance and Social Development Resource Centre.

Birungi, H., Mugisha, F., Nsabagasani, X., Okuonzi, S. & Jeppsson, A. 2001. The policy on public–private mix in the Ugandan health sector: catching up with reality. *Health Policy and Planning* 16**:** 80-87.

Blanchet, K. 2013. The Governance of Health Systems: Comment on'A Network Based Theory of Health Systems and Cycles of Well-Being'. *International Journal of Health Policy and Management* 1**:** 177-179.

Boulenger, D. & Criel, B. 2012. *The difficult relationship between faith-based health care organisations and the public sector in sub-Saharan Africa. The case of contracting experiences in Cameroon, Tanzania, Chad and Uganda.* Antwerp: ITG Press.

Brinkerhoff, D. W. & Brinkerhoff, J. M. 2011. Public–private partnerships: perspectives on purposes, publicness, and good governance. *Public Administration and Development* 31**:** 2-14.

Brinkerhoff, J. M. 2003. Donor-funded government—NGO partnership for public service improvement: Cases from India and Pakistan. *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 14**:** 105-122.

Chand, S. & Patterson, J. 2007. *Faith-based models for improving maternal and newborn health.* Washington, DC: USAID.

Chirwa, M. L., Kazanga, I., Faedo, G. & Thomas, S. 2013. Promoting universal financial protection: contracting faith-based health facilities to expand access–lessons learned from Malawi. *Health research policy and systems* 11**:** 27.

Cutter, S. L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E. & Webb, J. 2008. A place-based model for understanding community resilience to natural disasters. *Global Environmental Change* 18**:** 598-606.

Dahlberg, R. 2015. Resilience and complexity: conjoining the discourses of two contested concepts. *Culture Unbound: Journal of Current Cultural Research* 7**:** 541-557.

Davoudi, S., Shaw, K., Haider, L. J., Quinlan, A. E., Peterson, G. D., Wilkinson, C., Fünfgeld, H., McEvoy, D., Porter, L. & Davoudi, S. 2012. Resilience: a bridging concept or a dead end? (Abbreviated title). *Planning Theory & Practice* 13**:** 299-333.

De Savigny, D. & Adam, T. 2009. *Systems thinking for health systems strengthening.* Geneva: World Health Organization.

DFID. 2011. *Defining Disaster Resilience: A DFID Approach Paper.* London: Department for International Development.

Duff, J. F. & Buckingham, W. W. 2015. Strengthening of partnerships between the public sector and faith-based groups. *The Lancet* 386**:** 1786-1794.

European Commission. 2014. *Communication from the Commission. On Effective, accessible and resilient health system.* Brussels: European Commission.

Ewert, D. M. 1993. *A new agenda for medical missions.* Brunswick: MAP International.

Folke, C. 2006. Resilience: The emergence of a perspective for social–ecological systems analyses. *Global environmental change* 16**:** 253-267.

Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T. & Rockstrom, J. 2010. Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and Society* 50**:** 20.

Foster, N. 2012. *Private sector involvement in health services in East and Southern Africa: Country profiles.* Harare: EQUINET.

Gilson, L., Adusei, J., Arhin, D., Hongoro, C., Mujinja, P. & Sagoe, K. 1997. Should African governments contract out clinical health services to church providers. *In:* Bennet, S., Mcpake, B. & Mills, A. (eds.) *Private Health Providers in Developing Countries.* 276–306. London: Zed Books.

Gilson, L., Sen, P. D., Mohammed, S. & Mujinja, P. 1994. The potential of health sector non-governmental organizations: policy options. *Health Policy and planning* 9**:** 14-24.

Green, A., Shaw, J., Dimmock, F. & Conn, C. 2002. A shared mission? Changing relationships between government and church health services in Africa. *The International journal of health planning and management* 17**:** 333-353.

Greyling, C., Maulit, J. A., Parry, S., Robinson, D., Smith, S., Street, A. & Vitillo, R. 2016. Lessons from the Faith-Driven Response to the West africa Ebola Epidemic. *The Review of Faith & International Affairs* 14**:** 118-123.

Haakenstad, A., Johnson, E., Graves, C., Olivier, J., Duff, J. & Dieleman, J. L. 2015. Estimating the development assistance for health provided to faith-based organizations, 1990–2013. *PloS ONE* 10**:** e0128389.

Health Systems Global. 2015. *Resilient and Responsive Health Systems the focus of the Fourth Global Symposium on Health Systems Research* [Online]. Available: http://www.healthsystemsglobal.org/blog/45/Resilient-and-responsive-health-systems-the-focus-of-the-Fourth-Global-Symposium-on-Health-Systems-Research.html [Accessed 24 January 2016].

Health Systems Global. 2016. *Vancouver Statement for the Fourth Global Symposium on Health Systems Research* [Online]. Available: http://healthsystemsresearch.org/hsr2016/wp-content/uploads/Vancouver-Statement-FINAL.pdf [Accessed 24 January 2017].

Holling, C. S. 1996. Engineering resilience versus ecological resilience. *In:* Schulze, P. (ed.) *Engineering within ecological constraints.* 31-44. Washington: National Academies Press.

International Federation of Red Cross and Red Crescent Societies. 2012. *Characteristics of a Safe and Resilient Community: Community Based Disaster Risk Reduction Study.* Geneva: International Federation of Red Cross and Red Crescent Societies.

Jennings, M. 2015. The precariousness of the franchise state: voluntary sector health services and international NGOs in Tanzania, 1960s–mid-1980s. *Social Science & Medicine* 141**:** 1-8.

Kieny, M. P. & Dovlo, D. 2015. Beyond Ebola: a new agenda for resilient health systems. *The Lancet* 385**:** 91-92.

Kruk, M. E., Myers, M., Varpilah, S. T. & Dahn, B. T. 2015. What is a resilient health system? Lessons from Ebola. *The Lancet* 385**:** 1910-1912.

Kulig, J. C., Edge, D. S., Townshend, I., Lightfoot, N. & Reimer, W. 2013. Community resiliency: Emerging theoretical insights. *Journal of Community Psychology* 41**:** 758-775.

Kutzin, J. & Sparkes, S. P. 2016. Health systems strengthening, universal health coverage, health security and resilience. *Bulletin of the World Health Organization* 94**:** 867-868.

Lengnick-Hall, C. A. & Beck, T. E. 2005. Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management* 31**:** 738-757.

Lönnroth, K., Uplekar, M., Arora, V. K., Juvekar, S., Lan, N. T., Mwaniki, D. & Pathania, V. 2004. Public-private mix for DOTS implementation: what makes it work? *Bulletin of the World Health Organization* 82**:** 580-586.

Maresso, A., Wismar, M., Greer, S. & Palm, W. 2013. What makes health systems resilient and innovative? Voices from Europe. *Eurohealth* 19**:** 3-6.

McKenzie, A., Abdulwahab, A., Sokpo, E. & W Mecaskey, J. 2015. *Building a Resilient Health System: Lessons from Northern Nigeria.* Brighton: Institute of Development Studies.

McLoughlin, C. 2011. Factors Affecting State–Non-Governmental Organisation Relations In Service Provision: Key Themes From The Literature. *Public Administration and Development* 31**:** 240-251.

McPake, B. 2009. Hospital Policy in Sub-Saharan Africa and Post-Colonial Development Impasse. *Social History of Medicine* 22: 341-360.

McPherson, M., Counahan, M. & Hall, J. L. 2015. Responding to Typhoon Haiyan in the Philippines. *Western Pacific Surveillance and Response Journal* 6**:** 1-4.

Morrison, K. & Waltner-Toews, D. 2010. A spoonful of resilience. *Alternatives Journal* 36**:** 26-28.

Nemeth, C., Wears, R., Woods, D., Hollnagel, E. & Cook, R. 2008. Minding the gaps: creating resilience in health care. *In:* Henriksen, K., Battles, J. B., Keyes, M. A. & Grady, M. I. (eds.) *Advances in Patient Safety: New Directions and Alternative Approaches.* Rockwell: Agency for Healthcare Research Quality.

Olarinmoye, O. O. 2014. Accountability in Faith-Based Organizations in Nigeria. *Transformation* 31: 47-61.

Olivier, J., Tsimpo, C., Gemignani, R., Shojo, M., Coulombe, H., Dimmock, F., Nguyen, M. C., Hines, H., Mills, E. J., Dieleman, J. L., Haakenstad, A. & Wodon, Q. 2015. Understanding the roles of faith-based health-care providers in Africa: review of the evidence with a focus on magnitude, reach, cost, and satisfaction *Lancet* 386**:** 1765-1775.

Orach, S. O. 2008. Challenges of retaining health workers in the PNFP sector: the case of Uganda Catholic Health Network. *Health Policy and Development* 6**:** 31-36.

Palmer, N. 2006. *Non-state providers of Health Services.* London: Department for International Development (DFID).

RESYST. 2017. *Resources* [Online]. Available: http://resyst.lshtm.ac.uk/resources [Accessed 18 June 2016].

Rookes, P. & Rookes, J. 2012. Have financial difficulties compromised Christian health services' commitment to the poor? *Development in Practice* 22**:** 835-850.

Rookes, P. J. 2009. *Commitment, conscience or compromise: the changing financial basis and evolving role of Christian health services in developing countries.* PhD Thesis. The University of Birmingham.

Schmid, P. 2013. Mission medicine in a decolonising health care system: Agogo hospital, Ghana, 1945-1980. *Ghana studies* 15**:** 287-329.

Shoman, H., Karafillakis, E. & Rawaf, S. 2017. The link between the West African Ebola outbreak and health systems in Guinea, Liberia and Sierra Leone: a systematic review. *Globalization and Health* 13**:** 1-22.

Spake, M. & Thompson, E. C. 2013. Managing Resilience by Creating Purpose. *Frontiers of Health Services Management* 30**:** 14-24.

Ssengooba, F., Atuyambe, L., McPake, B., Hanson, K. & Okuonzi, S. 2002. What could be achieved with greater public hospital autonomy? Comparison of public and PNFP hospitals in Uganda. *Public Administration and Development* 22: 415-428.

Topp, S. M., Flores, W., Sriram, V. & Scott, K. 2016. *Critiquing the Concept of Resilience in Health Systems* [Online]. Health Systems Global. Available: http://www.healthsystemsglobal.org/blog/110/Critiquing-the-Concept-of-Resilience-in-Health-Systems.html [Accessed 24 January 2017].

Van Pletzen, E., Zulliger, R., Moshabela, M. & Schneider, H. 2013. The size, characteristics and partnership networks of the health-related non-profit sector in three regions of South Africa: implications of changing primary health care policy for community-based care. *Health Policy and Planning* 1-11.

Walker, D., Champion, C., Hossain, S., Wahed, T., Gazi, R., Koehlmoos, T., Asiimwe, C., Ranson, M. & Bennett, S. 2013. *Establishing non-state sector research priorities in developing countries using a participatory methodology.* Geneva: Alliance for Health Policy and Systems Research.

Woods, D. D. 2006. Essential characteristics of resilience. *In:* Hollnagel, E. (ed.) *Resilience engineering: Concepts and precepts.* 21-34. Boca Raton: CRC Press.

World Health Organization. 2014a. *High level meeting on building resilient systems for health in Ebola-affected countries.* Geneva: World Health Organization.

World Health Organization. 2014b. *The role of non-state providers in strengthening health systems towards Universal Health Coverage (UHC): Call for Proposals* [Online]. Available: www.who.int/alliance-hpsr/UHC_2014.pdf [Accessed 3 October 2016].

World Health Organization. 2017a. *Health Systems Strengthening Glossary* [Online]. Available: http://www.who.int/healthsystems/hss_glossary/en/index9.html [Accessed 7 February 2017].

World Health Organization. 2017b. *The WHO Health Systems Framework* [Online]. Available: http://www.wpro.who.int/health_services/health_systems_framework/en/ [Accessed 24 January 2017].

Wright, S., Hanna, L. & Malifert, M. 2015. *A wake-up call: lessons from Ebola for the World's Health Systems.* London: Save the Children.

Part C: Article Manuscript

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The contribution of non-state, faith based health providers to national health systems resilience: a study of four African countries

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Abstract

Health systems resilience is an important issue given that health systems are vulnerable to shocks and stressors that threaten their ability to produce good outcomes over time. Along with the rise in the interest of health systems resilience is the recognition that non-state providers (NSPs) remain relevant actors in African health systems, with faith-based health providers (FBHPs) one prominent group of NSPs. Literature from the 1990s on FBHPs suggested that they could be beneficial for national health systems resilience. This study sought to explore this suggestion by describing four country cases facing different kinds of health system shocks and stressors - and examining the role of FBHPs in these different contexts (South Sudan, the Democratic Republic of Congo, Malawi and Ghana). A flexible, multiple case study methodology was used – conducted in 2016-2017. The study confirmed that FBHPs contribute to national health systems resilience by supporting the development of sources resilience, namely strong health system building blocks and social capital. FBHPs also support the development of five resilient health systems characteristics: adaptive, diverse, aware, self-regulating, and integrated. The nature of these contributions vary to some extent based on the context, but the assets that enable these contributions remain

[1] Instructions for authors are in Appendix G. Authors' contribution and information are also excluded. For the purpose of this thesis, the student is the sole and first author of the work

similar. These assets include their long-term presence and established trust with health system actors, their infrastructure, their values and religious identity, their autonomous processes and flexibility, and their access to resources. As FBHPs lose their traditional sources of funding and become more reliant on donor and government funding, it appears that their contributions to heath systems resilience are being eroded. Given the prominence of FBHPs in many African contexts, and their likelihood of continuing as key providers in many health systems, further investigation is required to explore partnership configurations between governments and FBHPs that buffer health systems in the face of shocks and stressors.

Keywords: resilience, non-state providers, faith-based health providers, Africa, Ghana, Malawi, DRC, South Sudan, shocks, stressors, health policy and systems research

Key Messages

- Non-state, non-profit providers, especially faith-based health providers (FBHPs) remain relevant actors in African health systems and contribute to the resilience of national health systems.
- FBHPs support the development of key sources of health systems resilience – namely social capital, and strong health system building blocks – and characteristics of resilient health systems, namely adaptive, integrated, diverse, aware, and self-regulating.
- Financial constraints faced by FBHPs have increased their dependence on donors and government for funding, which in turn has eroded their ability to contribute to national health systems resilience.

Introduction

Health systems resilience is a topical issue in health policy and systems research (HPSR). The focus on resilience has arisen with the recognition that health systems are vulnerable to two types of disturbances: shocks and stressors. Shocks are understood as "sudden events that affect the vulnerability of a system and its components" (Department for International Development, DFID 2011), while stressors are "long-term trends that undermine the potential of a given system or process and increase the vulnerability of actors within it" (DFID 2011). Examples of shocks include the West Africa Ebola outbreak (2014–2016) (World Health Organization 2014d) and Super-typhoon Haiyan in the Philippines (McPherson et al. 2015). Examples of stressors are 'everyday' challenges such as financial constraints and human resource shortages. Both shocks and stressors have the potential to reverse gains made in health systems strengthening (Health Systems Global 2015). The West African Ebola outbreak cemented the focus of health systems resilience on the global health agenda (World Health Organization 2014), though it was already of high visibility in global discussions after the financial crisis of 2008 (European Commission 2014).

As a relatively new lens from which to study health systems, different definitions of health systems resilience exist. These range from the ability of health systems to absorb or bounce back after a disturbance (World Health Organization 2017a), to health systems that not only recover but also learn and transformation if the pre-disturbance state was untenable or unable to produce its intended outcome of providing good health for all (Blanchet 2013; Kruk et al. 2015; Maresso et al. 2013). This particular conceptualisation of health systems resilience allows for transformation of health systems, and is in line with the socio-ecological (SES) definition of resilience (Folke 2006; Holling 1996; Woods 2006), which is

also more in-line with the idea of complex adaptive systems (CAS) that has taken root in HPSR (De Savigny and Adam 2009). In this study, the definition of health systems resilience stems from this conceptualisation. We define it as the ability of a health system to maintain its core functions in order to provide health services, including during periods of short-lived and intense shocks, and during routine times when a health system faces ongoing stressors, with potential to learn from the disturbances and transform if the system requires it (see Kieny and Dovlo 2015; Kruk et al. 2015; Maresso et al. 2013). Key components of this definition of resilience therefore include: learning and adaptation, continuous improvement, and a long-term orientation. Resilience is also an 'emergent' outcome (Dahlberg 2015; Kruk et al. 2015; Kutzin and Sparkes 2016)[2]; though some sources state that one can work towards building resilience (International Federation of Red Cross and Red Crescent Societies 2012), it is likely that the resilience of a health system will only be known *after* it experiences a disturbance. Despite the increased attention on health systems resilience, limited information exists on how resilient health systems are built or the specific aspects that contribute to it.[3]

The initial scoping review conducted for this study (see Part B) showed that in the available literature, resilient health systems are understood to have certain *sources* (which are proposed to translate to the outcome of resilience after disturbance), and also certain *characteristics* (which are proposed to indicate that a health system is on a trajectory for a resilience after a disturbance). The various characteristics of a resilient health system that

[2] The outcome is emergent cannot necessarily be something that is implemented in itself but an outcome that emerges based on various factors inherent in the system, reflecting the property of health systems as complex adaptive systems.

[3] We do, however, recognise the emerging work of HPS Researchers such as those in the RESYST Consortia, where work on resilience in fragile states is being generated.

are proposed in the literature are well summarized in Kruk et al.'s (2015) framework, as being: diverse (in the services offered), self-regulating (able to contain threats and have redundant capacities), aware (of assets and vulnerabilities in a health system in order to mount an appropriate response), integrated (with a mix of actors and ideas including strong community engagement), and adaptive (systems that allow flexibility and enable transformation where needed). Sources of health systems resilience include social capital (Kieny and Dovlo 2015; Kruk et al. 2015) and strong health system based on primary health care (PHC) (European Commission 2014; Kieny and Dovlo 2015; Kruk et al. 2015; Maresso et al. 2013), and are composed of strong health systems building blocks (World Health Organization 2017b). Given that health systems are complex and adaptive (CAS), and have inherent feedback loops that influence the conditions of a health system, each disturbance and outcome from the disturbance feeds back into the health system, and influences the pre-conditions of a health system before the next disturbance; therefore, if a health system displays the *characteristics* of a resilient health system, these can also be *sources* of health systems resilience (or sources of vulnerability). Figure 1 depicts a conceptual framework that shows the relationship between the sources and characteristics of resilience in relation to health systems resilience, based on the aforementioned scoping review (see Part B).

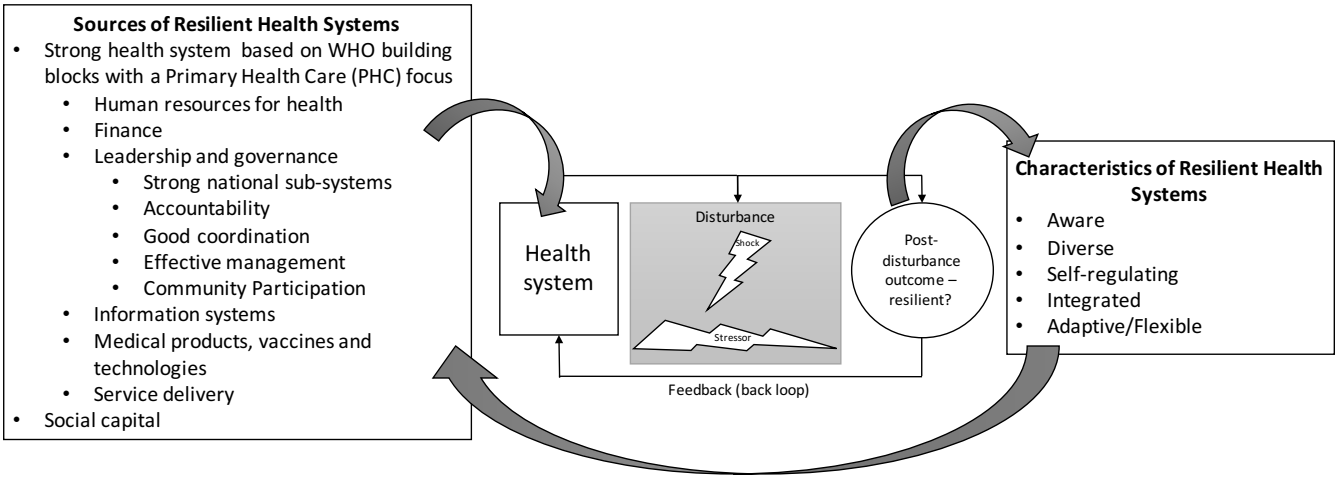

Figure 1: Sources and characteristics of health systems resilience (Source: Author)

The resilience of non-state health providers

Alongside the rise of interest in health systems resilience is growing recognition that non-state providers (NSPs) remain a relevant actor in health systems in low and middle-income countries (LMICs, see Batley and Mcloughlin 2009; Bennett 1997; Bennett et al. 2005; Foster 2012). Health-engaged NSPs in LMICs include a plethora of different types: non-profit organisations, private for-profit companies, pharmacies, faith- and community-based organisations, and the informal sector including traditional healers and health care practitioners (Batley and Mcloughlin 2009; Palmer 2006). In Africa, it is common for NSPs to be classified as either non-profit (private not-for-profit, PNFP) or for-profit (private for-profit, PFP), with PNFPs consisting of non-governmental organisations (NGOs) and faith-based health providers (FBHPs) (Foster 2012). Since the 1980s, there has been increased encouragement for more partnerships and formalisation of relationships between the private and the public sectors as part of health sector reforms (see Green et al. 2002; McLoughlin 2011; Rookes and Rookes 2012; Walker et al. 2013), based on the argument that health systems performance would be enhanced through such partnership (Boulenger

and Criel 2012). As such, there is a strong push for better engagement and partnerships with NSPs – for example from the World Health Organisation (WHO), as one way to achieve universal health coverage (UHC, Ascroft et al. 2011; Duff and Buckingham 2015).

In Africa, a prominent group of NSPs are FBHPs.[4] FBHPs are characterised by their religious values; and their work in health is usually driven by a humanitarian ethos characterised by prioritization of services for the poor and marginalized in society (McGilvray 1981; Olivier et al. 2015; Tomkins et al. 2015; Wodon et al. 2014). They have been present for over a century in many African health systems despite changes in governments and health sector reforms, and in some instances initiated biomedical service provision. In the last five years, over 100,000 FBHPs have been documented to operate in the continent (Aylward 2012; Duff and Buckingham 2015; Olivier et al. 2015). FBHPs in Africa reportedly deliver anywhere from 6% to 50% of health services (see Asante 1998; Kagawa et al. 2012; Maurice 2015; Olivier et al. 2015; Vogel et al. 2012; Wodon et al. 2014), though it is recognized that these are often self-reported numbers based on facility or hospital-bed comparisons, and may not be reliable (Olivier et al. 2015). Most FBHPs offer facility-based health services and some provide primary and home-based care (Schmid et al. 2008). FBHPs were also critical to the response to the human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic, which most affected the African continent, with FBHPs said to account

[4] The terminological terrain here is fraught. There has been a significant amount of critique of the classifications of 'faith-inspired entities engaged in health' (see Olivier et al. 2015). For the purpose of clarity, we have elected to use the term 'faith-based health provider' (FBHP) in this article – which for us signals health service providers who self-identify as being 'faith-based/inspired'. However, even then, this four country case study signals the complexities even in this classification. For example, in each of the four countries, there are core FBHPs (such as Catholic health facilities), networks of FBHPs (such as the Christian Health Associations), and also faith-based partner organisations (more Development Agency non-governmental organisation types) who also engage in support of or directly provide health services (in South Sudan and the DRC, for example, this would be IMA World Health).

for 20% of the organizations involved in the response (Maurice 2015; Olivier et al. 2015). FBHPs therefore have a prominent role in many African health systems.

They are also increasingly integrated into national health systems (Maurice 2015; Schmid et al. 2008; Olivier et al. 2015). To support this integration came the emergence of umbrella networks (such as the Christian Health Associations, CHAs), to enable improved negotiations with governments and unite FBHPs at a national level (Dimmock et al. 2012; Schmid et al. 2008). Despite the sustained presence of FBHPs in Africa and their growing integration into national health systems, almost nothing is known about their contributions to national health systems from the resilience perspective. This may be due to the fact that research on FBHPs have often focused more on studying the factors that make FBHPs unique as opposed to their relation as key actors integrated within development systems (Olivier 2016), including health systems.

Notwithstanding this lack of information, emerging empirical research on FBHPs suggests that they *could* be beneficial for national health systems resilience. Some of their key contributions to health systems resilience are likely to be their potential to support health system strengthening. For example, they appear to have supplemented service delivery during times of shocks, providing services when governments were unavailable and health systems were on the brink of collapse, as in the case of Uganda during the reign of the dictator Idi Amin (Birungi et al. 2001), Chad during the civil war (Boulenger and Criel 2012), and the Democratic Republic of Congo (DRC) after de-colonization (Ewert 1993). They also appear to have been beneficial in alleviating health systems stressors, complementing government services in the midst of resource constraints. Examples of this include

Zimbabwe (Gilson et al. 1997), Malawi (Banda and Simukonda 1994; Chirwa et al. 2013), and Tanzania - where FBHPs manage designated district hospitals (Gilson et al. 1997; Jennings 2015). Such observations suggest that FBHPs have likely played different roles in 'buffering' the national health system and supporting it to deliver health services in the face of shocks or stressors. There are limits to these contributions however, as FBHPs often continue to charge user fees, which limit access to health services especially among the poor who they intend to serve (Boulenger and Criel 2012; Gilson et al. 1994; Green et al. 2002; Olivier et al. 2015; Rookes and Rookes 2012; Rookes 2009; Schmid et al. 2008; Ssengooba et al. 2002).

Other likely contributions of FBHPs range from the perception that they might be better governed and are more efficient (than public), and provide better quality services - often linked to the idea that they have access to greater resources and the perception that they might have a more committed workforce (Gilson et al. 1997; McLoughlin 2011). However, as traditional sources of FBHP funding have decreased and their resources become constrained, they may no longer be able to offer better-quality services or have better governance than the public sector. Human resources for health training has also been a key activity of FBHPs as they often operate in contexts with severe human resource shortages (Adjei et al. 2009; Rookes 2009; Schmid et al. 2008; Van Pletzen et al. 2013). Given that the work of FBHPs was historically rooted in community-based, PHC (Ascroft et al. 2011; Duff and Buckingham 2015), FBHPs are also said to have built strong networks, and generated trust and social capital with communities (Ascroft et al. 2011; Duff and Buckingham 2015; Gilson et al. 1994; McLoughlin 2011; Van Pletzen et al. 2013).[5]

[5] We are intentionally focusing here on potential *contributions* of FBHPs to resilience. This is not to say that we do not recognise the massive challenges that FBHPs in Africa are known to be facing (such as critical financial

FBHPs as health system actors also appear to display several *characteristics* of health systems resilience proposed in literature (see Part B), which, given their prominence in African health systems, likely influence the characteristics of the national health systems that they are situated in. These include adaptability and flexibility in comparison to the public sector (as they traditionally had access to more resources), being less burdened by bureaucracy, and having a greater ability to innovate (although, as noted earlier, this may no longer be the case) (see Birungi et al. 2001; Brinkerhoff and Brinkerhoff 2011; Gilson et al. 1994; Gilson et al. 1997). As previously mentioned, over the last few decades, FBHPs in Africa are becoming significantly more integrated into national health systems – which is proposed by health system architects as being beneficial for health systems resilience.[6] There is however some fragmentation in the type of services provided (based on the religious values of FBHPs which prevent them from fully aligning with national guidelines) and the geographic areas served, though in some countries coordination has improved with support from national networking platforms for FBHPs and increased formal partnerships with government (Dimmock et al. 2012). The literature suggests, however, that these formal partnerships could also possibly detract from health systems resilience as they become more interdependent with government (see Part B). This will be explored in more detail in this study.

This study sought to confirm whether FBHPs do indeed contribute to national health systems resilience, by exploring and describing specific cases of countries facing health

resource constraints), or the questions levelled at them at times about limited quality, or service provision utilised as a form of proselytization (see discussion section, see also Tomkins et al. 2015; Olivier et al. 2015).

[6] Such as the proponents of the 'public private mix' in the 1990s (see Bennet et al. 1997; World Bank 1993)

system shocks and stressors and the role of FBHPs in these different contexts. The long-term presence of FBHPs in African health systems makes them a useful territory in which to explore the topic of health systems resilience over time. In addition, the broader literature suggests quite strongly that FBHPs may be beneficial for national health systems resilience (see Part B) – although there is a major dearth of empirical evidence to support these claims (on health systems resilience in general, as well as the particular role of FBHPs in supporting this outcome). These factors make this research timely and substantively relevant.

This study thus aims to fill gaps in our understanding of health systems resilience by examining the experiences of FBHP contribution to national systems resilience, looking at four country cases: South Sudan, the Democratic Republic of Congo (DRC), Malawi and Ghana. These cases were chosen based on the diversity of their contexts, with South Sudan and the DRC classified as fragile states (World Bank 2016) and Malawi and Ghana as relatively stable states. This diversity in cases was sought in order to examine the differences (if any) in understanding health systems resilience in different contexts and the responses of FBHPs in these different contexts, as the effectiveness of FBHPs have been suggested to depend on the context they operate in (see Leurs 2012). These countries were also chosen based on the significant presence of FBHPs, most of which have there since the 1800s (Alliance for Health Policy and Systems Research 2016; Banda and Simukonda 1994; IMA World Health 2015; Olivier et al. 2015). The key shocks and stressors faced by each health system in the last 40 years are described and analysed to understand health systems resilience over time, as well as how FBHPs in particular have been perceived to influence health system resilience in that period.

Methods

A flexible multiple case study methodology was used. Data was collected in two phases during 2016 and 2017: Phase 1 was an exploratory survey to identify experiences of FBHPs against different types of health system shocks and stressors, and Phase 2 was the development of four cases identified from Phase 1. Participants were initially recruited through the Africa Christian Health Associations (ACHAP) network, then a snowballing approach was utilized to recruit ACHAP partners who also support health provision in the four selected countries. A literature review of scientific articles and grey literature was conducted in both English and French for Phase 2. Thereafter, in-depth and intercept interviews were held with key informants (n=13) to supplement data gathered from the literature review. Further data and literature was gathered from key informants. A thematic data analysis was conducted using Nvivo software. Data triangulation was conducted across the multiple sources of evidence, as well as comparison between cases. Initial guidance for data collection and the framing of the study findings is based on the conceptual framework presented in Figure 1.

Ethical clearance for this study was gained through the University of Cape Town Human Research Ethics Committee (HREC Reference: 205/2016). Consent for participation was obtained prior to data collection. A data use agreement was signed with one cluster of respondents from Interchurch Medical Assistance (IMA) World Health, a faith-inspired organisation whose base of operations is in the United States, but who is active in both South Sudan and the DRC. Research information briefs and data collection tools were translated in both French and English (see Appendices). The identity of participants was kept

confidential and interviews were anonymised – and where necessary the names of organizations were also anonymised.

Study limitations include the small number of key informants to supplement the data collected and literature review. Government informants were under-represented, thus the findings could be biased towards FBHP stakeholder perspectives (and therefore possibly put FBHP contributions in a more positive light than if there had been a more diversified respondent group). A diverse set of academic and grey literature was gathered to mitigate these, although limited evidence was available for some countries - especially in the more fragile states where health systems research is more challenging due to insecurity (Berendes et al. 2014) and is therefore massively limited (Jones et al. 2015). For example, there was very little (almost no) empirical HPSR on the South Sudanese and DRC contexts, which took non-state providers into account, at the start of this study.

Results

Results are divided into 4 sections: 1) shocks and stressors per case and the role FBHPs in the face of these disturbances, 2) contributions of FBHPs to sources of resilient health systems, and 3) contributions of FBHPs to characteristics of resilient health systems, and 4) potential erosion of FBHP contributions to health systems resilience. Again, it is necessary to reiterate that the focus and form of this reporting focuses mainly on the 'positive' aspects of FBHPs' contribution to national health systems resilience. However, we are in no way blind to the limitations of FBHPs, or the challenges they face – and do address this in some detail in the sections below.

Shocks and stressors per country case – and the role of FBHPs

In Table 1 that follows, we summarize the key shocks and stressors per country case and the role of FBHPs in these contexts. This table is not intended to be an exhaustive list of the shocks and stressors per country or the operations of FBHPs, but presents those that were highlighted in the data collected for this study in order to understand the corresponding roles of FBHPs in the face of these shocks and stressors. The table therefore presents a synthesis of secondary literature (referenced at the bottom) and primary sources (interviews, surveys, primary institutional documentation).

	SOUTH SUDAN	DEMOCRATIC REPUBLIC OF CONGO	MALAWI	GHANA
GENERAL HEALTH INDICATORS				
Population (thousands)	11911.184	74877.03	16695.253	26786.60
GDP per capita (US Dollars)	1097	440.00	255	1627.00
Infant mortality rate	26	234.00	28	39.00
Maternal mortality ratio	Not available	670	510	350
Births attended by skilled health personnel (%)	17.2	80.10	87.4	67.20
Access to health services (% population)	44% can consult doctor within 5 kilometres (km)	<25%	46% can consult doctor within 5km	50% can consult doctor within 5km
Health funding from abroad (%)	42%	38%	74%	1%
Government expenditure on health % general government expenditure (includes donor funds)	4%	11%	17%	7%
Out of pocket expenditure as % of total health expenditure	54.36%	57.35%	12.65%	26.84%
Cost of public health services	Free	User-fee based	Free	User-fee based
Self-reported estimates of private service health care provision	70% - 80% non-state, non profit	Approximately 50%	40%	40 - 50%
Self-reported FBHP share of private health provision	No clear figures for FBHPs	36.4% of health facilities	37% health service provision	40% health service provision
Examples of FBHPs known to be currently present	Catholic Medical Mission Board, Caritas, IMA World Health	Protestant Church of Congo (ECC-DOM), Santé Rural (SANRU), Caritas, Members of Christian Health Association of the DRC, Bureau Diocésan des Oeuvres (BDOM) – Catholic Church facilities	Members of the Christian Health Association of Malawi (CHAM), Quadria Muslim Association of Malawi	Members of the Christian Health Association of Ghana (CHAG), Amadea Muslim Mission
SHOCKS				
Armed conflict → effects include insecurity, attacks on health facilities, health facility closures, damage and looting to equipment, mass migration and displacement, increased poverty, collapse of sub-national health systems, health worker departures, donor withdrawal, increases of sexual and gender based violence (SGBV)	20-year civil war with Sudan (ended 2005); 2013 civil war; ongoing fighting, interethnic and intercommunal violence ***FBHP role**: continued service provision; FBHP clinics less likely to be attacked; creation of mobile clinics for internally displaced people (IDPs) staffed by county health departments (CHDs) trained by FBHPs prior to conflict; distribution of multi-month antiretroviral therapy (ART) prescription for IDPs via religious leaders or trained community volunteers; developed monitoring capacity pre-conflict, resulted in data provided from areas where IDPs are via CHDs, community volunteers, and religious leaders*	1990s – early 2000s civil war; rebel occupation in 1/3 country; ongoing fighting in east and other parts of country ***FBHP role:** Continued service provision with minimal funds; maintained health workers; negotiation with chiefs/militia groups for health commodities (drugs) to pass to affected populations based on long-term presence and local staff*	(Not mentioned as a priority)	Ethnic conflicts at Dagbon and Bawku traditional areas

	SOUTH SUDAN	DEMOCRATIC REPUBLIC OF CONGO	MALAWI	GHANA
Political regime change → effects include political instability, at times economic crises and increased poverty, health sector development slows	2011 South Sudan independence from Sudan ***FBHP role:*** *continued service provision with new government, based on changed relationship with government coordinating health actors*	De-colonization 1957; transition from one-party to multi-party state in 1990s; ongoing political and social instability also led to economic crisis which increased poverty ***FBHP role****: continued services despite political instability and financial constraints*	De-colonization 1964; transition from one-party to multi-party state 1994 ***FBHP role:*** *continued service provision throughout regime changes*	12 regime changes; 5 military regimes and 4 republican/ democratic regimes with 7 elected presidents ***FBHP role:*** *continued service provision throughout regime changes*
Health sector reform → varying effects based on reform	One-donor per state system post-independence → consolidated all NSPs under one donor, placed government in coordination and oversight role ***FBHP role:*** *now coordinate with and repot to government instead of operating in isolation*	Creation of health zones from 1976 - 1990 based on PHC/decentralized approach (and rebuilding health zones starting early 2000s) ***FBHP role:*** *first partners to pilot health zones, managed between 40-70% of health zones over time*	(Not mentioned as a priority)	1980s 'Cash and Carry' (user-fee) based healthcare led to barriers to accessing care and financial challenges for health facilities; 2003 transition from 'Cash and Carry' to (NHIS) ***FBHP role:*** *innovated on community-based health insurance scheme (CBHI) which formed the basis for NHIS; key implementing agency for NHIS*
Economic Crisis → decreased government investments in health, increased poverty	2012 shut-down of oil led to austerity measures → decreased government funding for health care infrastructure ***FBHP role:*** *continued service provision and rehabilitation of facilities via donor funds*	Poor economic management and political instability ***FBHP role:*** *mobilized external funding for health provision, exemption policies for poor*	(Not mentioned as a priority)	1970s/1980s, led to World Bank structural adjustment program that decreased civil servants and led to 'cash and carry' user fee system ***FBHP role:*** *innovated on CBHI*
Natural disasters → various effects	Frequent drought and climatic shocks → led to inadequate water, increased diseases, and crop failure/food insecurity and malnutrition	(Not raised as a critical shock)	2015 floods → crop failure/food insecurity and malnutrition *FBHP role: Support humanitarian response to floods*	Ongoing floods: 2015 twin disaster of fire and flood
Health epidemic (short-term) → various effects	(Not mentioned as a priority)	Seven Ebola outbreaks (1976 – 2014) ***FBHP role:*** *Mobilized network to mobilize logistics for incoming international teams; utilized sisters to communicate on transmission prevention*	Seasonal cholera outbreaks (chronic) ***FBHP Role:*** *Provide care in corresponding health facilities; cholera programs*	Cholera outbreaks (regular/chronic)
STRESSORS				
Health epidemic (prolonged)	HIV/AIDS ***FBHP role****: Distribute ART (provided free through government) through health facilities, establish community volunteers to support treatment adherence*	HIV/AIDS; SGBV ***FBHP role****:* Distribute ART (provided free through government) through health facilities; support holistic, multi-stakeholder program to address SGBV	HIV/AIDS ***FBHP role****:* Distribute ART (provided free through government) through	HIV/AIDS ***FBHP role****:* Distribute ART (provided free through government) through health facilities
Climate-related stressors/geography-related stressors → various effects	Rainy season → some areas inaccessible Interethnic ***FBHP role:*** *utilize boat transfers and*	Vast landscape, some areas inaccessible because of inadequate infrastructure	Low rainfall → crop failure/food insecurity and malnutrition ***FBHP role:*** *Malnutrition programs in*	(Not mentioned as a priority)

	SOUTH SUDAN	DEMOCRATIC REPUBLIC OF CONGO	MALAWI	GHANA
	conducted dry season health promotion campaigns (innovations)		*certain facilities*	
Resource constraints: from infrastructure and supply, to knowledge and information systems, human resources , and finance → led to decreased access to health care through decreased availability, affordability, and acceptability	Insufficient and inequitable distribution of public health facilities; inadequate quantity and quality of equipment; frequent drug shortages; health worker shortages, inequitable distribution of health workers, difficulty retaining in rural areas, frequent turnover of foreign staff (especially during bouts of insecurity); donor-dependent; 2013 crisis leading donors to invest; austerity measures ***FBHP role:*** *Provide health facilities in areas unserved by government; distribute essential drugs on behalf of government (for HIV, malaria, tuberculosis (TB), etc.); supported MoH to Develop essential drug list for more responsive distribution; procure drugs independently; huma resources training; supported government to develop national health management and information system (MIS) which is harmonized among partners,*	Insufficient and inequitable distribution of public health facilities; inadequate quantity and quality of equipment; frequent drug shortages; health worker shortages, inequitable distribution of health workers, difficulty retaining in rural areas; health worker strikes; questionable quality of available staff and training institutions; high staff turnover and migration (especially during times of conflict); unregulated health sector and training institutions; large donor influence on activities; lack of political will to invest in health; corruption; donor-dependent; prohibitive user fees at public facilities ***FBHP Role:*** *distribute essential drugs on behalf of government (for HIV, malaria, tuberculosis, etc.); procure drugs independently; established first public health school; provide scholarships and other incentives to retain rural health workers; supported government to develop national health management and information system (HMIS) Received international grants to rebuild health zones; receive donor funds to distribute essential medicines for priority diseases, and to decrease cost of user fees; pilot community health insurance scheme*	Insufficient and inequitable distribution of public health facilities; inadequate quantity and quality of equipment; frequent drug shortages; health worker shortages, inequitable distribution of health workers, difficulty retaining in rural areas; weak information systems; Donor-dependent (>70% healthcare funded from abroad); government corruption led to decreases in donor funds since 2013 ***FBHP Role:*** *Provide 42% of hospital beds, health facilities in rural areas; default district facility where public facility not-available; distribute essential drugs on behalf of government (for HIV, malaria, tuberculosis, etc.); procure drugs independently; run training colleges, send 60% graduates to public facilities; incentives to retain health workers in rural areas; CBHI scheme pilot; government agreement to provide free services to for certain groups; absorb funds from donors in lieu of government (due to corruption); exemptions or in-kind payments for poor*	Insufficient and inequitable distribution of public health facilities; inadequate quantity and quality of equipment; frequent drug shortages; health worker shortages, inequitable distribution of health workers, difficulty retaining in rural areas, government health worker strikes from 1998 to present; Classification as middle-income country decreased donor funding ***FBHP Role:*** *Provide 37% health services; facilities in rural areas or urban poor; distribute essential drugs on behalf of government (for HIV, malaria, tuberculosis, etc.); procure drugs independently; few training colleges; incentives to retain health workers in rural areas; zero-strike policy maintains health-workers in times of strikes; CBHI pilots, adopted as NHIS exemptions for poor; sick funds for poor*
Weak governance and leadership	Large donor influence on activities ***FBHP Role:*** *Investments in CHDs*	Unregulated health sector and training institutions; large donor influence on activities; lack of political will to invest in health; corruption ***FBHP Role:*** *Advocacy to government, investments in health zone leadership*	Uncoordinated health sector; large donor influence on activities; corruption	(Not mentioned as a priority)

(Source: Author synthesis from Phase 1 survey and World Health Organization 2017; Heritage Foundation 2017; World Health Organization 2014a; World Health Organization 2014b; World Health Organization 2009; World Health Organization 2014c; World Bank 2017; Christian Connections for International Health 2007; World Health Organization 2014e; World Health Organization 2016; DFID 2013; Aylward 2012; Jones et al. 2015; Antwi et al. 2014; MacKinnon and MacLaren 2012; The SHOPS Project 2011; DCA Act Alliance 2017; Makinen et al. 2011; Alliance for Health Policy and Systems Research 2016; IMA World Health 2016; IMA World Health 2017a; IMA World Health 2011; IMA World Health 2015; IMA World Health 2017b; Sthreshley 2015; Baer 2013; Baer et al. 2015; Christian Health Association of Malawi 2016; Abiiro et al. 2014; Chikopa 2017; Chirwa et al. 2013; Banda and Simukonda 1994; Makoka 2015; Christian Health Association of Ghana 2014; Rasheed 2009; Dzowela 2017)

Table 1 shows how the role of FBHPs in each system is influenced by the historical context, including shocks and stressors. Malawi and Ghana have more stable contexts, and though they have experienced some shocks, the regular disturbances they face lean more towards chronic health system stressors. It appears that the shocks and stressors are interconnected and influence each other over time, with some shocks creating stressors or aggravating stressors already present in the system. One example is the stressor of political instability and mismanagement of finances in the DRC, which led to the shock of the economic crisis, and also contributed to a stressor of severe financial constraints for households. Another example is the shock of an economic crisis in Ghana (in the late 1970s and early 1980s), followed by structural adjustment programs,[14] that decreased the number of civil servants in the country and increased the enforcement of user fees. These exacerbated an already stressed health system with limited human resources and created the long-term stressor of financial constraints for households to access care. The interconnectedness of shocks and stressors in these cases reflect the nature of health systems resilience as complex and adaptive (as CAS), with feedback loops continuously influencing the conditions of a health system. The latter example of Ghana also demonstrate that policy adaptations made to ensure financial sustainability in the public sector (including the health sector) achieved its intended outcomes of stabilizing the economy but also created a stressor later on.

[14] SAPs were loans with linked conditions provided by the International Monetary Fund (and World Bank) to selected countries in the 1980s to alleviate the effects of economic crises – which had a significant impact on health and development sectors in these case countries.

FBHP contributions to the 'sources' of resilient health systems

Respondents to this study overwhelmingly argued that FBHPs *do* support the development of sources of national health systems resilience. We unpack their main arguments here, in particular those arguments supported by the primary and secondary documentation (but noting again, the limitations of this study in terms of responses mainly coming from FBHP perspectives). The next two sections, unless indicated otherwise in the text, is drawn from the synthesis of the case study materials (the interviews, survey and primary documentary analysis).

Their first key contribution is through strengthening specific health system building blocks. As evident in Table 1, all FBHPs contributed in some way to the training of human resources for health (HRH). FBHP colleges under CHAM in Malawi not only produced a large share of human resources per year, but also sent 60% of their graduates to public facilities (Christian Health Association of Malawi 2016). The extent of human resources training undertaken by FBHPs in Ghana is today comparatively less than that provided by the public sector, but FBHP training colleges do still exist (Aylward 2012). In South Sudan and the DRC, it is acknowledged that FBHPs contribute to training - though the specifications are not well documented. Interestingly, FBHPs in the DRC supported the creation of the first school of *public health*, which was later taken over by government (Kintaudi n.d.). FBHPs in all four country cases pioneered approaches to retain health workers especially in rural areas, from scholarships to study abroad, hardship allowances, bonuses and housing. Some of these incentives motivated staff to stay and work for FBHPs even during times of shock. An (unavoidably lengthy) extract from a DRC study respondent elaborates on this:

> *"Most [health workers] … don't wait just to get salaries. I would not spend 11 years in the rural area, if I have to make money… I wanted to serve. Even when I finished the Masters… a British colleague… came with a job opportunity where I can get a lot of money. And I said, you know when I came here I got a scholarship from the church … he said 'the job opportunity I'm suggesting … you can [use it to] reimburse the scholarship. But my point was, it was not the issue of money. I think it would be a big deal for myself and for my church and for the next generation…"* (DRC respondent TH1 2017)

Service delivery is another contribution of FBHPs. The reported shares of their contributions to health service provision range from 30-50% (Christian Health Association of Malawi 2016; Yeboah 2017; Baer 2013). The data is particularly unclear in South Sudan because of the unstable situation there, though FBHPs are described as representing a 'significant' part of the NSP sector – which is known to provide approximately 80% of all health services. Drugs for priority diseases such as HIV, TB and malaria, are subsidised by donors and distributed through government, and are also distributed through FBHP health facilities, thereby extending the reach of government. In all four countries, FBHP facilities are *historically* located in rural areas, promoting more equitable access to health services – although in Ghana and Malawi it has been noted that gradual urbanisation has begun to shift this profile (Olivier et al. 2015). The common practice of charging user fees for services (which all FBHPs interviewed do – although in various forms and only on some services), also limits their service delivery contributions and contribution to equitable health services.

In the face of shocks, in all four countries there is evidence of FBHPs adapting their activities. In South Sudan and the DRC for example, insecurity led to transitioning facility-based services to mobile clinics staffed by county health department (CHD) staff previously trained by FBHPs. Another adaptation made in one FBHP program in South Sudan was the distribution of antiretroviral therapy (ART) through their network of community volunteers or religious leaders who also moved with displaced communities.

During times of public sector health worker strikes in the DRC and Ghana, a zero-strike policy is maintained (as far as possible), based on the Christian values of FBHPs which means that demand for health services are channelled through FBHPs. In Ghana, the government apparently encourages its citizens to go to facilities under CHAG when government health workers strike. FBHPs also adapted service delivery in the face of health system stressors, for example, by shifting health promotion campaigns from rainy to dry seasons to ensure all communities are reached, and by piloting community-based health insurance (CBHI) schemes to alleviate the stress of financial hardship for households and to increase financing for FBHPs (discussed further below).

In relation to service delivery is the observation of the contribution FBHPs make to medical products, vaccines and technologies - as they are often cited to have better equipment and drug availability (than the public sector). FBHPs tend to have their own additional drug procurement systems and sources, despite agreements with some of the national governments to also access central medical stores (the government supply system); thus, in some instances FBHPs have parallel drug supply systems, but these parallel systems may also be beneficial for whole systems resilience. For example, people turned to FBHPs for

drugs when public facilities were lacking. In Malawi, CHAM facilities were reported to experience a surge in demand when malaria drugs were unavailable in public facilities. In addition to autonomous procurement systems, one FBHP in South Sudan receives supplementary drugs from a faith-based partner in the United States. When government or donors delay their drug distribution, the FBHP uses these drugs to continue providing services. In South Sudan, one FBHP also supported government to develop an essential drug list to ensure availability of drugs for common diseases, developing a more responsive system than the one previously in place.

Improved leadership and governance is supported by FBHPs through strengthening sub-national systems. These are more evident in the DRC and South Sudan with investments in CHDs and in health zones (similar to districts in other countries). Since 1976, strengthening health zones was a core activity of FBHPs in the DRC, where they managed FBHPs on behalf government. This investment in health zones (coupled with FBHP access to resources) enabled FBHP facilities to continue service provision in the 1990s during times of political instability and conflict in the DRC, when government was almost completely disengaged from healthcare provision.

> *"…these health zones became very autonomous and strong on their own and figured out ways to survive. The ones that were with the Church … maybe it's only 30,000 [United States] dollars a year, but often that was sufficient and they could keep the drugs and replace equipment, the things that the other institutions could not do, and so when things were really very bad in Congo, Churches health systems, or facilities were a bit better run."* (DRC respondent TH2 2017)

In South Sudan, investments in the management capacities of CHDs during routine times led to more ownership of programs. In the wake of the 2013 civil war, these investments paid off. When CHD staff were also displaced along with the populations they served, they continued service provision through mobile clinics, the majority of which were constantly moving due to insecurity. This approach of engaging local actors differed from other NSPs often staffed with international actors that were forced to suspend their services during bouts of insecurity.

> *"…the entire Jonglei state was subcontracted to the NGOs ... all international NGOs aside from one, but in some areas … [FBHP name] started working directly with the County Health Departments, once the county health department has that ownership … you find that even when there is no funding or something like that, so long as there are drugs, most of the facilities continue … to operate …"* (South Sudan respondent TH6 2017)

In Ghana, CHAG supported improved governance and regulation, providing input to national regulations including the National Health Insurance Scheme (NHIS).

> *"…CHAG participated in restructuring exercises within the health sector… and helped with mapping services including describing the extent of the human resource crises. CHAG worked with government to work out strategies to ensure health service coverage for rural areas and conceptualize national health insurance policies."* (Rasheed 2009)

With regards to strengthening the finance building block, FBHPs contribute by mobilizing external sources of funds and decreasing financial barriers to accessing care. In the more fragile states of the DRC and South Sudan, the long-term presence of FBHPs in the health sector (both local and those with international connections), during times of shocks and thereafter, have built their credibility as a recipient for donor funds to supplement government service delivery. When donors returned in 2001 to the DRC for example, FBHPs received grants to revive non-functional health zones given their experience of maintaining health zone functionality in the times of shock. FBHPs continue to be a strong mobiliser of international funds particularly in fragile states of the DRC, South Sudan, and in stable but donor-dependent Malawi. Differential access to finances enable FBHPs to rebuild and continuously manage health zones in the DRC and to provide services neglected by public facilities (such as mental health in Ghana). FBHPs piloted CBHI schemes in Ghana, Malawi and the DRC - as user-fees have been a major health system stressor (it is unclear in the available data how much of a barrier this is in South Sudan). In Ghana the CBHI scheme initiated by FBHPs was later adapted into the NHIS to address the health system stressor of user fees that was said to prevent 69% of the population from accessing health services in 1992 (Alliance for Health Policy and Systems Research 2016). Although this is a contribution of FBHPs, it is also important to note that these innovations were often driven by the need of FBHPs to cover their operating costs,[15] as FBHPs usually charge user fees (thereby also contributing to financial stressors posed by households). In the more stable contexts of Malawi and Ghana, financial barriers to accessing care are also being addressed through

[15] FBHPs have generally been under financial constraints for many years due to decreases in traditional sources of funding (Rookes 2009) – see discussion section for more details on this and other challenges regarding FBHPs in health systems.

more formal partnerships with government, where FBHPs receive funding support from government order to provide free services to the poor. In Ghana this is through the NHIS, while in Malawi there are district service-level agreements (SLAs). These agreements do not guarantee free services however; in some instances where government did not follow through on their financing agreements, user fees continued to be charged in Malawi and in Ghana on some services, and CHAG has been known to suspend its services. Some FBHP respondents also claimed to provide exemptions for poor patients based on their values, demonstrated by one respondent from the DRC below.

> *"Most of these health services, they function on the basis of Christian ethics and values… sometimes … they have to pay in kind. What I was doing was to give them a portion of land and say 'could you please clean'? …this is something that in the government or in the private sector nobody would do that."* (DRC respondent TH1 2017)

Another respondent from the DRC however claimed that no exemptions are made by FBHPs *"because somebody has to pay"* (DRC respondent TH2 2017). This simply indicates the variability that is found within FBHPs – and that they often adapt differently to systems stressors.

Weak information systems were not explicitly stated as a key stressor for governments (aside from Malawi, where this was noted). However, FBHPs did support governments in the DRC and South Sudan to establish national health management and information systems (HMIS), enabled by availability of donor funds. In Ghana it was noted that CHAG supported

the mapping of services and human resources. In South Sudan, training on monitoring prior to the 2013 civil war is said to have paid off. The government has since taken ownership of the system, and data now flows from the counties all the way to central government even from areas where displaced populations move; this increases awareness in the health system and enables FBHPs and government to provide more responsive support.

FBHPs in all countries were said to have strong *social capital*, another source of resilience. Respondents (supported by available literature) claimed that FBHPs are trusted by communities due to their long-term presence, service provision in areas unserved by other providers, and perception of better quality services linked to better equipment and drug availability. FBHPs are a preferred service provider even for poor households despite charging user fees (Abiiro et al. 2014). Deep knowledge of the context and presence of local staff are also said to enable some FBHPs to negotiate with village chiefs and militia in conflict-affected areas of the DRC to let vehicles carrying drugs to pass. In South Sudan, key informants claimed that facilities belonging to FBHPs were less likely to be attacked than other health facilities, hence service provision remained largely uninterrupted. Most notably, informants pointed out that during conflict, when the public system collapsed, and other NSP actors left – most FBHPs in the DRC and South Sudan remained functioning – during the time of shock and afterwards.

> *"…the faith based providers were operating through the 21 years of war between Sudan and South Sudan … until now."* (South Sudan respondent TH4 2017)

> *"…everybody leaves the country … [only] those working for churches stayed ... more than 80% [of] services [were] provided by FBOs [faith-based organisations] as the state system collapsed. Civil servants were not getting paid [so] they [left] hospitals … [the] only functional hospital[s] are those that are run by churches…"* (DRC respondent TH2 2017)

This quote is suggestive of the commitment of FBHP health workers, as many stayed during times of crises (also a form of social capital to be considered). As noted earlier, FBHPs have strong social capital with communities and are said to be trusted as key sources of health information. One respondent recalls their experience responding to the first Ebola outbreak in the DRC.

> *"[we as outsiders, we] didn't have dialogue with community but knew that the nurse [a sister] was there for years … [we] asked her if she could convey information to the people … I was really shocked … they changed in less than a week…"* (DRC respondent TH2 2017)

It was suggested that FBHPs also have social capital with governments due to their share of service provision and access to donor funds (especially in fragile states), both of which enabled them to have a seat at the policy level.

FBHP contributions to the 'characteristics' of resilient health systems

The case study demonstrated that FBHPs, as key actors within their respective health systems, also made some contributions to shaping the *characteristics* of their health

systems. Namely, characteristics that are likely to be supportive of *whole systems resilience*. Most of these characteristics appear to have been developed through some of their contributions to 'sources' of health systems resilience. As such, this set of findings will elaborate more on characteristics not evident in the previous section. For example, contributions of FBHPs to health systems *awareness* was already described in the previous section as part of the information systems health system building block.

The ability to *adapt*, particularly for service delivery (with examples outlined in the section above), was a demonstrated characteristic of FBHPs in all four countries in this case study, which in turn was seen to influence the health system they are nested within. Other examples of adaption include suspending activities that expose staff and projects to the effects of insecurity such as looting. In the more fragile contexts of South Sudan and the DRC, the FBHPs studied appeared to be adept at switching from more routine health systems strengthening activities to humanitarian response when needed (and back again with the stressor was lessened). The ability of FBHPs to adapt in these times of shock appeared to have been developed *prior* to the onset of the shocks - during routine times. One FBHP (in South Sudan), said that their flexibility was also aided by short-term contracts, as they often received 3-6 month contracts from their donor. Short-term contracting is challenging from a planning standpoint, but was noted to be beneficial from a flexibility and responsiveness perspective.

Linked to adaptation is the ability of FBHPs to *innovate*. Several FBHP health systems innovations were mentioned, including the aforementioned CBHI (in multiple countries), health zone development (in the DRC), and CHD-focused capacity building and health

worker salary harmonization (in South Sudan). These innovations were often driven by the need to adapt to their changed health systems context. For example, harmonization of salaries initiated by one FBHP came from the need to reduce staff turnover between government and international NSPs that often pay better than the local government. Interestingly, the innovations listed above have all since been adopted by national governments. The outlier is CBHI – which was an innovation in 3 countries, but was only taken up at a national level in Ghana (absorbed into the NHIS) – but that is more of an indication of the Ghanaian system's readiness for NHI, and the major problem user fees had become nationally in that country (Alliance for Health Policy and Systems Research 2016).

FBHPs can also contribute by making a health system *diverse* – for example, through their array of activities that are often broader and more diverse that what is usual for a public health facility. It has also been noted for some time that FBHPs have a particular orientation towards community-based engagement, that spreads out around the facilities, which are committed to the principles of PHC (which many have noted was strongly influenced by the Christian Medical Commission in the 1960s and 1970s) (McGilvray 1981). However, today, this PHC focus appears more evident in the fragile states of the DRC and South Sudan, while in Malawi and Ghana, FBHPs appear more focused on tertiary-level, specialist and curative care. For example, in Ghana, CHAG has acknowledged the need to improve their engagement with communities in their current strategic plan (Christian Health Association of Ghana 2014).

FBHPs in this case study have shown instances where they have supported health systems be more *self-regulating*. In the 1995 Ebola outbreak, FBHPs in the DRC used their network of

local leaders, community members, and strong government relationship to quickly set up logistics for an international team to arrive and contain the threat, stopping the outbreak in a relatively short timeframe. In 2007, they also used the experience from 1995 and collaborated with the same international team from the Centres for Disease Control and Prevention (CDC). It is possible that they had some 'redundant capacity' at that particular time could be allocated for the response.[16]

> *"We were lucky in 2007 there were two mission personnel that were able to drop what they were doing and get almost full time, and they set up all the logistics and the CDC came in with about 10 or 12 technicians and did the [medical work] after."* (DRC respondent TH3 2017)

Autonomous drug procurement systems also support self-regulation and helps with the response to public facility drug shortages. As noted earlier, these procurement systems often ran parallel to government systems, but allow FBHPs to buffer the common stressor of drug shortages - though it comes with the down-side of user fees. Additionally, the very presence of FBHPs in these systems possibly provides some much-needed 'redundant capacity'. They have proven to be an important alternative service provider where public facilities are inaccessible due to health worker strikes (as in Ghana and the DRC), or due to limited geographic access due to distance (in all country cases). When public facilities are unacceptable due to poor quality of services (particularly in Malawi but likely holds true in the other cases as well), FBHPs are also an alternative option.

[16] Redundant capacity refers to parts of a system that are not utilized to their full capacity, which can theoretically be re-allocated to respond to unexpected shocks (Kruk et al. 2015).

FBHPs support health systems to be *integrated* through their efforts to improve their integration into the national health systems – seen in all four country cases.[17] As such, cross-sector coordination (of varying levels and strengths) exists. FBHPs complement government services, providing alternatives in terms of service providers during shocks and stressors (examples outlined above). The level of integration of FBHPs into national health systems varies per country, and is influenced by history and context. In more fragile states of the DRC and South Sudan, FBHPs are integrated through common outcomes, are somewhat regulated by government (though more loosely supervised than FBHPs in more stable contexts), and generally implement a core set of nationally agreed upon activities. In the DRC (unlike in South Sudan), many FBHPs also have an agreement with government to provide services on behalf of the public sector in exchange for financial support (see Murru and Pavignani 2012), though the extent that government provides these payments is questionable (see Bertone et al. 2016). In the more stable states of Malawi and Ghana, the integration of FBHPs into the national system is more systematic and tightly-regulated. As with the DRC, the state also provides substantial financial subsidisation (mainly FBHP health worker salaries), which comes with much tighter regulation and supervision from the Ministry of Health. The Malawian government provides 89% of CHAM's total budget (usually for salaries), while 70% of CHAG salaries are funded by government. Though there are also gaps in Malawi and Ghana in the ability of government to follow through on these funding agreements, it appears that the governments in these more stable states follow through on these agreements more regularly than in the fragile context of the DRC.

[17] Respondents from all cases claim that FBHPs are integrated into national health systems, but the integration seems much less in the fragile states.

Erosion of health systems resilience contributions due to financial constraints

Much of the ability of FBHPs to contribute to health systems resilience in these cases relied on their access to financial resources (in addition to their perceived social capital and their religious values). Their traditional sources of funding often provided more autonomy and flexibility than government or set donor funds (Gilson et al. 1997). These funds enabled innovation on responses to shocks or stressors and development of 'redundant capacities' such as drug procurement. However, as FBHPs in more stable states have become more reliant on government for funding, and in turn has become more integrated with governments, this ability to be flexible and responsive has been constrained (as their financial resources have become less diversified, more limited, and more regulated).

Concerns over the loss of flexibility to innovate and to manage human resources that is perceived to come with the increased integration with government, are present in both Ghana and Malawi. Arguably though, FBHPs that rely more heavily on donor funding (such as those in South Sudan and the DRC), have also lost some level of these capacities, as they also have to negotiate with donors for more human resources or funds to innovate. For example, one FBHP in South Sudan wanted additional staff for capacity building of CHDs, but this request was denied by the donor. Delays in reimbursements from government is a key challenge of FBHPs in the more stable states with formalized partnerships, and actually develops into a health system stressor (indeed, at this time, in Ghana, poor reimbursements from NHIS is shifting from a stressor to a shock for CHAG member facilities). FBHPs perceive that they are less able to maintain quality services, especially with the increased demand in services that the government agreements generated. They are therefore worried that they will lose their identity as a quality service provider, and their (faith-oriented) values-based

identity as they may evolve to be no different from public facilities. With this perceived loss, they could also lose the ability to be an alternative service provider, thus decreasing 'redundant capacity' in the whole system. Over time, FBHPs are also receiving fewer long-term missionary staff, which has lessened the redundant capacity within FBHPs, as they have less 'extra' staff to support their activities.[18] Diversity of services in more stable states are also at risk of decreasing, as there is an acknowledged bias (acknowledged by a respondent from Ghana) to offer more services reimbursed by government, instead of what might actually be needed on the ground, and by those most in need.

Even countries that are more fragile, with higher dependency on donor funds (and less support from traditional sources of funding such as from denominational bodies), FBHPs recognize that they can be flexible - but only to a certain extent.

> *"We're flexible... But the normal system [reliant on donor funds and user fees] usually does not have enough funding to do very much."* (DRC respondent TH3 2017)

Discussion and conclusions

FBHPs have a sustained a decades-long presence in many African health systems - and can therefore be considered to have a certain basic resilience themselves. For example, in the systems in which they are prevalent, they have faced massive health systems change, and faced multiple shocks or stressors (see Table 1). There are indeed some African countries where the numbers of FBHPs have reduced over time – most notably South Africa where the

[18] Missionary staff were traditionally sent and funded by international denominational bodies to FBHPs for long-term (multi-year) assignments – but this has become increasingly limited, with 'short-term' mission being more common.

FBHPs were nationalised into the public system in the 1970s (see Olivier et al. 2015). However, even there, there has recently been a 're-emergence' of FBHPs engaged in health service provision – although displaying different institutional forms (see Porter 2016). This suggests the general 'resilience' of FBHP engagement in health in these contexts – or the 'resilience' of faith-communities' commitment to being engaged in health and healthcare.

However, this paper was focused less on the resilience of FBHPs (as in how many are there), and rather on the contribution of FBHPS to *national whole systems resilience*. That is, how the presence and activities of FBHPs, as key health system actors, might have possibly influenced the resilience of the whole health system. This is a perspective that is sorely missing from most research on FBHPs – which tends to examine them separately from their health systems context (see Olivier et al. 2015). This is also in recognition of the fact that one dimension of health systems resilience is the ability of actors to *absorb* and *respond* to threats (see European Commission 2014; Kieny and Dovlo 2015; Kruk et al. 2015; McKenzie et al. 2015).

Although FBHPs are important actors in health systems – and we have so far focused on their potentials and contributions - it would be remiss not to acknowledge the challenges and controversies associated with them. These include the use of health service provision for proselytization (Olivier et al. 2015), and controversies regarding their beliefs and resulting practices on issues such as family planning, abortion, and sexuality, to name a few (Tomkins et al. 2015). For many years, FBHPs have also been financially constrained and are struggling to sustain their services (Rookes 2009). At the same time, they have struggled to prove their value-add to national health systems, which has been questioned, especially

when their facilities are now often located in the same areas as public facilities (Christian Health Association of Malawi 2016; Alliance for Health Policy and Systems Research 2016). In fact, market assessments revealed that the proportion of services provided by FBHPs were likely overestimated (Olivier et al. 2015). There is also little empirical data to support their claims of better quality services, or exemption policies for the poor. There is a general acknowledgement on the need for more research on FBHPs (Tomkins et al. 2015; Olivier et al. 2015).

Notwithstanding these challenges, this study pushes us towards the conclusion that FBHPs remain relevant health in and to African health systems - and appear to contribute to whole health systems resilience. One obvious limitation of this study was the limited number of public sector respondents, which put FBHP contributions to health systems resilience in a more positive light than is generally supported in the broader literature (which shows a more balanced view on contributions and detractions). However, we believe that FBHP contributions to health systems resilience remain worthwhile for consideration as they remain relevant actors in African health systems today.

We have argued that the contributions of FBHPs to whole systems resilience lie in both the *sources* and the *characteristics* of resilient health systems, and in some instances where FBHPs appear to support health system transformation for the better. The nature of these contributions vary - mainly because of contextual differences. In more fragile states, FBHPs appear to be more flexible and adaptive, likely as a function of their contexts that fluctuate between conflict and stability. FBHPs operating in these less stable states, with weak health systems, also appeared to take a stronger role in supporting the development of sub-

national systems. In stable states with more established governments, however, FBHPs appeared to fit with and work alongside, the already established sub-national structure. In more stable states, FBHPs appear to be a stronger contributor to achieving universal health coverage, as their contributions leaned towards increasing access and use of health care - but their common imposition of user fees does appear to lessen this contribution.

Although conducting activities to strength health systems is more difficult in fragile states, some FBHPs included in this study actively engaged in these activities, especially during routine, non-crises times. The shocks that these health systems experienced (from the South-Sudan/Sudan war and the DRC conflict in the 1990s), and the inflow of donor support thereafter, opened opportunities to strengthen health systems. These investments in health systems strengthening during routine times, when a health system is challenged by stressors, was demonstrated as an important buffer against future shocks. Working on building the *sources* and developing the *characteristics* of resilient health systems should therefore not only occur in fragile states or states that have experienced shocks. Even health systems facing stressors need equal attention paid to building resilience. At any point the context could change which could present a shock to any health system. By the time the shock occurs, there is not much that could be done to steer the system towards resilience as the system has already been configured to react in a certain way (see Part B on more detailed discussion on the dynamics of resilience).

Despite different contexts, the foundation of FBHP contributions appear to remain similar and fit into some of the key sources and characteristics of resilient health systems proposed in the broader literature. These include contributions to health systems strengthening,

building strong social capital, and supporting health systems to be more adaptive, diverse, aware, self-regulating, and integrated. However, these contributions have some limitations (such as inequitable service delivery due to user fees) and may be eroded as the traditional sources of FBHP funding decreases. Integration of FBHPs into government systems through formal contracts to alleviate these financial constraints has become common in stable states like Malawi and Ghana. However, these cases demonstrate that this makes FBHPs less flexible and more focused on the bottom line. This is not a new finding, as it was suggested some time ago by researchers such as Gilson et al. (1997), but it has never actually beed studied (to the best of our knowledge). These cases suggest that the current way of envisioning and managing (public-private) partnerships between government and FBHPs, especially in stable systems, may be strengthening regulation and governance – but may simultaneously be resulting in more brittle and less resilient health systems. This requires substantially more consideration.

To apply Holling's (1996) distinction between different ways of conceptualizing resilience, current FBHP and government partnership arrangements appear to manage for "efficiency of function" (otherwise known as engineering resilience) or operational efficiency - that does not allow for much variability and perhaps too rigidly regulates the partnership (at least too rigidly if one is focused on health systems resilience). Following the same framework by Holling (1996), the other approach to manage for resilience is in line with socio-ecological resilience. It aims for 'existence of function' of the whole system as opposed to efficiency, and each actor has flexibility to "[perform their] actions somewhat differently from others, and … [respond] differently to external variability" (Holling 1996), or changes in the environment/context. This approach maintains functional diversity, spreads

risk, and keeps redundancies. It implies that some level of inefficiency and 'looser' regulation in FBHP and government partnerships may be required for more resilient health systems to be developed, but of course this needs to be balanced with the impetus for regulation (largely based on mitigating market failures such as lack of consumer protection, accountability, and equity in services, see Bennet 2005). This idea warrants further studies to explore what (in practice), partnerships should look like that maintain functional diversity for health systems - and the type and level of 'redundancies' required, and are acceptable, in African and other LMIC health systems that are resource-constrained.

In conclusion, this research shows that faith-based non-state providers remain a relevant type of component in the architecture of LMIC health systems and have been shown to contribute to health systems resilience. Given this, governments should continue to seek to nurture relationships with FBHPs, policy-makers and researchers should consider taking them into account more frequently (while being aware of the challenges inherent in working with FBHPs), and FBHPs should be encouraged to look more regularly beyond their own resilience (their survival), towards their contribution to whole systems resilience. At the same time, it is important to keep in mind that formalized partnerships may erode their contributions to health systems resilience, and thus further exploration on how to configure these partnerships is warranted. Further inquiry in understanding health systems resilience in African health systems where there are fewer FBHPs (and where we suspect there will be other varied and interesting forms of NSPs playing similar roles), would also be valuable.

References

Abiiro, G. A., Mbera, G. B. & De Allegri, M. 2014. Gaps in universal health coverage in Malawi: a qualitative study in rural communities. *BMC health services research* 14**:** 234.

Adjei, G., Everd, M., Dokotala, T., Kahabi, J., Isaac, M., Pamba, P. & Pearl, E. 2009. *Quest for Quality. Interventions to Improve Human Resources for Health among Faith-Based Organisations.* Amsterdam: Royal Tropical Institute (KIT).

Alliance for Health Policy and Systems Research 2016. Historical Narrative for the AHPSR Study on non-state providers in Ghana (Internal Reference Document). Geneva: Alliance for Health Policy and Systems Research.

Antwi, H. A., Lulin, Z., Yiranbon, E., Maxwell, B. A., Agebase, A. J., Yaw, N. E. & Vakalalabure, T. T. 2014. The Protestant Ethic and the Spirit of Capitalism and Healthcare Entrepreneurship in Mission Hospitals in Ghana *International Journal of Academic Research in Economics and Management Sciences* 3**:** 184-203.

Asante, R. K. O. 1998. *Sustainability of church hospitals in developing countries: a search for criteria for success.* Geneva: World Council of Churches.

Ascroft, J., Sweeney, R., Samei, M., Semos, I. & Morgan, C. 2011. *Strengthening church and government partnerships for primary health care delivery in Papua New Guinea: Lessons from the international experience.* Melbourne: The Nossal Institute for Global Health.

Aylward, L. 2012. *Global Health and Africa: Assessing Faith Work and Research Priorities.* London: Tony Blair Faith Foundation & World Faiths Development Dialogue.

Baer, F. 2013. Faith-based Myth Busting in DR Congo. Presented at: *Christian Connections for International Health (CCHI) Conference*, 9 June 2013. Arlington. Unpublished document.

Baer, F., Miatudila, M., Martin, R., Kalula, K., Utshudi, A., Derstine, P., Kintaudi, N. M., Zabusu, D. & Santos, R. 2015. The Long Road to Health for All and by All. Presented at: *Christian Connections for International Health (CCHI) 29th Annual Conference*, 26 - 29 June 2015. Arlington. Unpublished document.

Banda, E. E. N. & Simukonda, H. P. 1994. The public/private mix in the health care system in Malawi. *Health Policy and Planning* 9**:** 63-71.

Batley, R. & Mcloughlin, C. 2009. *State capacity and non-state service provision in fragile and conflict-affected states.* Birmingham: Governance and Social Development Resource Centre.

Bennett, S., Hanson, K., Kadama, P. & Montagu, D. 2005. *Working with the non-state sector to achieve public health goals.* Geneva: World Health Organization.

Bennett, S., McPake, B., Mills, A. 1997. The public/private mix debate in health care. *In:* Bennett, S., Mcpake, B., Mills, A. (ed.) *Private Health Providers in Developing Countries: Serving the Public Interest?* 1-18. London: Zed Books.

Berendes, S., Lako, R. L., Whitson, D., Gould, S. & Valadez, J. J. 2014. Assessing the quality of care in a new nation: South Sudan's first national health facility assessment. *Tropical Medicine & International Health* 19**:** 1237-1248.

Bertone, M. P., Lurton, G. & Mutombo, P. B. 2016. Investigating the remuneration of health workers in the DR Congo: implications for the health workforce and the health system in a fragile setting. *Health Policy and Planning* 31: 1143-1151.

Birungi, H., Mugisha, F., Nsabagasani, X., Okuonzi, S. & Jeppsson, A. 2001. The policy on public–private mix in the Ugandan health sector: catching up with reality. *Health Policy and Planning* 16**:** 80-87.

Blanchet, K. 2013. The Governance of Health Systems: Comment on'A Network Based Theory of Health Systems and Cycles of Well-Being'. *International Journal of Health Policy and Management* 1**:** 177-179.

Boulenger, D. & Criel, B. 2012. *The difficult relationship between faith-based health care organisations and the public sector in sub-Saharan Africa. The case of contracting experiences in Cameroon, Tanzania, Chad and Uganda.* Antwerp: ITG Press.

Brinkerhoff, D. W. & Brinkerhoff, J. M. 2011. Public–private partnerships: perspectives on purposes, publicness, and good governance. *Public Administration and Development* 31**:** 2-14.

Chikopa, A. 2017. The Malawi PPP Model: CHAM's experience. Presented at: *8th Biennial African Christian Health Associations Platform Conference*, 26 February - 3 March 2017. Maseru. Unpublished document.

Chirwa, M. L., Kazanga, I., Faedo, G. & Thomas, S. 2013. Promoting universal financial protection: contracting faith-based health facilities to expand access–lessons learned from Malawi. *Health research policy and systems* 11**:** 27.

Christian Connections for International Health. 2007. *Overview of ECC-DOM* [Online]. Available: http://ccih.org/grham/country/drcongo/drcongo-ecc-overview.html [Accessed 30 October 2007].

Christian Health Association of Ghana. 2014. *Christian Health Association of Ghana: Strategic Framework 2014 - 2018.* Accra: Christian Health Association of Ghana.

Christian Health Association of Malawi. 2016. *Christian Health Association of Malawi 2015 Annual Report.* Lilongwe: Christian Health Association of Malawi.

Dahlberg, R. 2015. Resilience and complexity: conjoining the discourses of two contested concepts. *Culture Unbound: Journal of Current Cultural Research* 7**:** 541-557.

DCA Act Alliance. 2017. *Quadria Muslim Association of Malawi (QMAM)* [Online]. Available: https://www.danchurchaid.org/partners/africa/malawi/quadria-muslim-association-of-malawi-qmam [Accessed 22 February 2017].

De Savigny, D. & Adam, T. 2009. *Systems thinking for health systems strengthening.* Geneva: World Health Organization.

DFID. 2013. *Annual Review: Accès aux Soins de Santé Primaires (ASSP).* London: Department for International Development.

DFID. 2011. *Defining Disaster Resilience: A DFID Approach Paper.* London:

Dimmock, F., Olivier, J. & Wodon, Q. 2012. Half a century young: the Christian Health Associations in Africa. *In:* Olivier, J. & Wodon, Q. (eds.) *Strengthening faith-inspired health engagement, Vol 1: The role of faith-inspired health care providers in sub-Saharan Africa and public-private partnerships* 71-103. Washington, DC: The World Bank.

Duff, J. F. & Buckingham, W. W. 2015. Strengthening of partnerships between the public sector and faith-based groups. *The Lancet* 386**:** 1786-1794.

Dzowela, T. 2017. Building the evidence base on FBO/CHA contributions: Rhetoric to Action. Presented at: *8th Biennial African Christian Health Associations Platform Conference*, 26 February - 3 March 2017. Maseru. Unpublished document.

European Commission. 2014. *Communication from the Commission. On Effective, accessible and resilient health system.* Brussels: European Commission.

Ewert, D. M. 1993. *A new agenda for medical missions.* Brunswick: MAP International.

Folke, C. 2006. Resilience: The emergence of a perspective for social–ecological systems analyses. *Global environmental change* 16**:** 253-267.

Foster, N. 2012. *Private sector involvement in health services in East and Southern Africa: Country profiles.* Harare: EQUINET.

Gilson, L., Adusei, J., Arhin, D., Hongoro, C., Mujinja, P. & Sagoe, K. 1997. Should African governments contract out clinical health services to church providers. *In:* Bennet, S., Mcpake, B. & Mills, A. (eds.) *Private Health Providers in Developing Countries.* 276–306. London: Zed Books.

Gilson, L., Sen, P. D., Mohammed, S. & Mujinja, P. 1994. The potential of health sector non-governmental organizations: policy options. *Health Policy and planning* 9**:** 14-24.

Green, A., Shaw, J., Dimmock, F. & Conn, C. 2002. A shared mission? Changing relationships between government and church health services in Africa. *The International journal of health planning and management* 17**:** 333-353.

Health Systems Global. 2015. *Resilient and Responsive Health Systems the focus of the Fourth Global Symposium on Health Systems Research* [Online]. Available: http://www.healthsystemsglobal.org/blog/45/Resilient-and-responsive-health-systems-the-focus-of-the-Fourth-Global-Symposium-on-Health-Systems-Research.html [Accessed 24 January 2016].

Heritage Foundation. 2017. *Democratic Republic of Congo* [Online]. Available: http://www.heritage.org/index/country/democraticrepubliccongo [Accessed 20 February 2017].

Holling, C. S. 1996. Engineering resilience versus ecological resilience. *In:* Schulze, P. (ed.) *Engineering within ecological constraints.* 31-44. Washington: National Academies Press.

IMA World Health. 2011. *Project AXxes* [Online]. Available: http://imaworldhealth.org/axxes-project/ [Accessed 9 February 2017].

IMA World Health. 2015. *Repositioning Primary Health Care in South Sudan. Transitioning from NGO-Managed to MOH-Directed Primary Health Care Service Delivery.* Washington: IMA World Health

IMA World Health. 2016. *Access to Primary Healthcare (ASSP) Program Overview.* Washington: IMA World Health

IMA World Health. 2017a. *Committed to serving the most vulnerable in South Sudan* [Online]. Available: http://imaworldhealth.org/ima-committed-to-serving-the-most-vulnerable-in-south-sudan/ [Accessed 24 January 2017].

IMA World Health. 2017b. *South Sudan* [Online]. Available: https://imaworldhealth.org/south-sudan/ [Accessed 24 January 2017].

International Federation of Red Cross and Red Crescent Societies. 2012. *Characteristics of a Safe and Resilient Community: Community Based Disaster Risk Reduction Study.* Geneva: International Federation of Red Cross and Red Crescent Societies.

Jennings, M. 2015. The precariousness of the franchise state: voluntary sector health services and international NGOs in Tanzania, 1960s–mid-1980s. *Social Science & Medicine* 141**:** 1-8.

Jones, A., Howard, N. & Legido-Quigley, H. 2015. Feasibility of health systems strengthening in South Sudan: a qualitative study of international practitioner perspectives. *BMJ open* 5**:** e009296.

Kagawa, R. C., Anglemyer, A. & Montagu, D. 2012. The Scale of Faith Based Organization Participation in Health Service Delivery in Developing Countries: Systemic Review and Meta-Analysis. *PloS ONE* 7**:** e48457.

Kieny, M. P. & Dovlo, D. 2015. Beyond Ebola: a new agenda for resilient health systems. *The Lancet* 385**:** 91-92.

Kintaudi, L. n.d. FBOs and the Ministry of Health in DR Congo. Presentation. Unpublished document.

Kruk, M. E., Myers, M., Varpilah, S. T. & Dahn, B. T. 2015. What is a resilient health system? Lessons from Ebola. *The Lancet* 385**:** 1910-1912.

Kutzin, J. & Sparkes, S. P. 2016. Health systems strengthening, universal health coverage, health security and resilience. *Bulletin of the World Health Organization* 94**:** 867-868.

Leurs, R. 2012. Are faith-based organisations distinctive? Comparing religious and secular NGOs in Nigeria. *Development in Practice* 22**:** 704-720.

MacKinnon, J. & MacLaren, B. 2012. *Human resources for health challenges in fragile states: evidence from Sierra Leone, South Sudan and Zimbabwe.*

Makinen, M., Sealy, S., Bitrán, R. A., Adjei, S., Muñoz, R. & Investment. 2011. *Private health sector assessment in Ghana.* Washington: The World Bank.

Makoka, M. 2015. Strengthening PPPs and inter-faith partnerships for UHC: Example from Malawi. Presented at: *7th Biennial African Christian Health Associations Platform Conference*, 25 February 2015. Nairobi. Unpublished document.

Maresso, A., Wismar, M., Greer, S. & Palm, W. 2013. What makes health systems resilient and innovative? Voices from Europe. *Eurohealth* 19**:** 3-6.

Maurice, J. 2015. Faith-based organisations bolster health care in Rwanda. *The Lancet* 386**:** 123-124.

McGilvray, J. 1981. *The Quest for Health and Wholeness.* Tübingen: German Institute for Medical Mission.

McKenzie, A., Abdulwahab, A., Sokpo, E. & W Mecaskey, J. 2015. *Building a Resilient Health System: Lessons from Northern Nigeria.* Brighton: Institute of Development Studies.

McLoughlin, C. 2011. Factors Affecting State–Non-Governmental Organisation Relations In Service Provision: Key Themes From The Literature. *Public Administration and Development* 31**:** 240-251.

McPherson, M., Counahan, M. & Hall, J. L. 2015. Responding to Typhoon Haiyan in the Philippines. *Western Pacific Surveillance and Response Journal* 6**:** 1-4.

Murru, M. & Pavignani, E. 2012. Democratic Republic of Congo: The Chronically-Ill Heart of Africa. *Providing Health Care in Severely-Disrupted Environments. A Multi-Country Study.* Brisbane: University of Queensland.

Olivier, J. 2016. Hoist by our own petard: Backing slowly out of religion and development advocacy. *HTS Teologiese Studies/Theological Studies* 72**:** 1-11.

Olivier, J., Tsimpo, C., Gemignani, R., Shojo, M., Coulombe, H., Dimmock, F., Nguyen, M. C., Hines, H., Mills, E. J., Dieleman, J. L., Haakenstad, A. & Wodon, Q. 2015. Understanding the roles of faith-based health-care providers in Africa: review of the evidence with a focus on magnitude, reach, cost, and satisfaction. *Lancet* 386**:** 1765-1775.

Palmer, N. 2006. *Non-state providers of Health Services.* London: Department for International Development (DFID).

Porter, J. D. 2016. *Is it just the prayer? Determining and exploring patients' reasons for choosing a faith-based primary health clinic over their local public sector primary health clinic.* Masters Thesis. University of Cape Town.

Rasheed, F. 2009. *Collaborations Between Public Health Systems and Faith-Based Organizations: Memorandum of Understanding Between the Ministry of Health and the Christian Health Association of Ghana* Geneva: The World Health Organization.

Rookes, P. & Rookes, J. 2012. Have financial difficulties compromised Christian health services' commitment to the poor? *Development in Practice* 22**:** 835-850.

Rookes, P. J. 2009. *Commitment, conscience or compromise: the changing financial basis and evolving role of Christian health services in developing countries.* PhD Thesis. The University of Birmingham.

Schmid, B., Thomas, E., Olivier, J. & Cochrane, J. 2008. *The contribution of religious entities to health in sub-Saharan Africa. Study commissioned by Bill & Melinda Gates Foundation. Unpublished Report.* ARHAP.

Ssengooba, F., Atuyambe, L., McPake, B., Hanson, K. & Okuonzi, S. 2002. What could be achieved with greater public hospital autonomy? Comparison of public and PNFP hospitals in Uganda. *Public Administration and Development* 22: 415-428.

Sthreshley, L. 2015. *Stopping Ebola in its tracks: Maximizing a Health System Approach for an Improved Epidemic Response Recommendations from IMA's Experiences Containing Ebola Outbreaks in the DRC.* Washington: IMA World Health.

The SHOPS Project. 2011. *Malawi Private Health Sector Assessment.* Bethesda: Abt Associates.

Tomkins, A., Duff, J., Fitzgibbon, A., Karam, A., Mills, E. J., Munnings, K., Smith, S., Seshadri, S. R., Steinberg, A. & Vitillo, R. 2015. Controversies in faith and health care. *The Lancet* 386**:** 1776-1785.

Van Pletzen, E., Zulliger, R., Moshabela, M. & Schneider, H. 2013. The size, characteristics and partnership networks of the health-related non-profit sector in three regions of South Africa: implications of changing primary health care policy for community-based care. *Health Policy and Planning* 1-11.

Vogel, J. P., Betrán, A. P., Widmer, M., Souza, J. P., Gülmezoglu, A. M., Seuc, A., Torloni, M. R., Mengestu, T. K. & Merialdi, M. 2012. Role of faith-based and nongovernment organizations in the provision of obstetric services in 3 African countries. *American Journal of Obstetrics and Gynecology* 207**:** 495.e1-495.e7.

Walker, D., Champion, C., Hossain, S., Wahed, T., Gazi, R., Koehlmoos, T., Asiimwe, C., Ranson, M. & Bennett, S. 2013. *Establishing non-state sector research priorities in developing countries using a participatory methodology.* Geneva: Alliance for Health Policy and Systems Research.

Wodon, Q., Olivier, J., Tsimpo, C. & Nguyen, M. C. 2014. Market share of faith-inspired health care providers in Africa. *The Review of Faith & International Affairs* 12**:** 8-20.

Woods, D. D. 2006. Essential characteristics of resilience. *In:* Hollnagel, E. (ed.) *Resilience engineering: Concepts and precepts.* 21-34. Boca Raton: CRC Press.

World Bank. 1993. *World Development Report 1993: Investing in Health*. Washington. The World Bank.

World Bank. 2017. *Overview (DRC)* [Online]. Available: https://www.worldbank.org/en/country/drc/overview [Accessed 10 February 2017].

World Bank. 2016. *Harmonized List of Fragile Situations* [Online]. Available: http://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations [Accessed 12 February 2017].

World Health Organization. 2017a. *Health Systems Strengthening Glossary* [Online]. Available: http://www.who.int/healthsystems/hss_glossary/en/index9.html [Accessed 7 February 2017].

World Health Organization. 2017b. *The WHO Health Systems Framework* [Online]. Available: http://www.wpro.who.int/health_services/health_systems_framework/en/ [Accessed 24 January 2017].

World Health Organization. 2014a. *Democratic Republic of the Congo: The country that knows how to beat Ebolas* [Online]. World Health Organization. Available: http://www.who.int/features/2014/drc-beats-ebola/en/ [Accessed 19 February 2017].

World Health Organization. 2014b. *Ghana Country Cooperation Strategy at a glance.* World Health Organization.

World Health Organization. 2014c. *Malawi Country Cooperation Strategy at a glance.* World Health Organization.

World Health Organization. 2014d. *High level meeting on building resilient systems for health in Ebola-affected countries.* Geneva: World Health Organization.

World Health Organization. 2014e. *South Sudan Country Cooperation Strategy 2014 - 2019.* World Health Organization.

World Health Organization. 2016. *South Sudan Country Cooperation Strategy at a glance.* World Health Organization.

World Health Organization. 2017. *National Health Accounts* [Online]. Available: http://www.who.int/health-accounts/en/ [Accessed 24 January 2017].

World Health Organization. 2009. *Malawi Country Cooperation Strategy 2008 - 2013.* World Health Organization.

Yeboah, P. 2017. Partnership Towards SDG/UHC: The CHAG Experience. Presented at: *8th Biennial African Christian Health Associations Platform Conference*, 27 February to 3 March 2017. Maseru. Unpublished document.

Appendices

Appendix A: ACHAP Information Briefs

To be sent via email to ACHAP Secretariat and its members.

RESEARCH INFORMATION BRIEF

The contribution of non-state faith-based health providers to health systems resilience in Africa

Health systems resilience has emerged as focus area with the recognition that health systems are vulnerable to to shocks that threaten its ability to produce good health outcomes over time. These shocks can be acute, as with short-lived health epidemics or natural disasters, or chronic, which could include limited staff capacity or resources. Unless resilience is developed, years of investment in health could be reversed. Despite its emerging importance, little documentation is available on how resilient health systems are built and what contributes to resilience. One proposal to improve health systems resilience is more effective partnerships among health system actors.

Non-state providers (NSPs) remain relevant health system actors despite significant investments in the public sector. They continue to provide crucial services including primary health care in many low and middle-income countries (LMICs). Faith-based health providers (FBHPs) are one set of NSPs that maintain a strong presence in Africa. They have demonstrated several competencies in health provision, including preference for serving the rural poor, a holistic, community-based approach to health, and provision of services in instances when government services are unavailable. FBHPs may therefore have unique competencies that contribute to sustaining good health outcomes in times of unexpected shocks and ongoing demands on health systems. Little research however has been conducted on how FBHPs contribute to health systems from a resilience perspective.

The aim of this study is to explore and describe how non-state FBHPs contribute to health systems resilience. The findings are expected to contribute to understanding the nature of, and potential strategies for, resilience building through partnerships.

Question: *How do non-state faith-based health providers contribute to resilient health systems in Africa"?*

Approach: Multiple case study involving 2 phases. Phase 1 is an exploratory survey to identify relevant experiences, and Phase 2 is the development of 3 case studies identified in phase 1.

Case Proposition: The main case study proposition is that FBHPs contribute in some way to health systems resilience by virtue of their mission and operations in Africa. Many FBHPs have been present in their areas of operation for decades; this ongoing presence through times of reforms and massive changes in their operating context must have presented instances where FBHPs have supported health systems to continue providing good health outcomes in the midst of threats. Perhaps there is something inherent in the mission of FBHPs or the structure of their operations that enable resilience building. As this is a flexible research design, this proposition has room to evolve if other propositions emerge throughout the course of the study.

Timeline

- May to June 2016 - Phase 1: Brief survey of ACHAP members
- June 2016 - Phase 2: Case study development via key informant interviews and desk review
- July 2016 to August 2016 - Cross-case analysis and follow-up
- September to October - Write-up and consultation

Researchers

University of Cape Town: Ms Jolly Ann Maulit & Dr Jill Olivier

For more information, please contact:

Dr. Jill Olivier
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University of Cape Town, Health Policy and Systems Division, School of Public Health and Family Medicine, Anzio Road, Observatory, 7925, South Africa
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This study is supported by the Health Policy and Systems Division (University of Cape Town) and the International Religious Health Assets Program (IRHAP) – and is conducted in coordination with the African Christian Health Association Platform (ACHAP).

INFORMATION BRÈVE

La contribution des prestataires de santé confessionnels non étatiques aux systèmes de santé résilience en Afrique

Les systèmes de santé résilients ont émergé comme la zone de mise au point avec la reconnaissance que les systèmes de santé sont vulnérables aux chocs qui menacent sa capacité à produire de bons résultats en matière de santé au fil du temps. Ces chocs peuvent être aigus, comme les épidémies de santé de courte durée ou des catastrophes naturelles voire chroniques qui pourraient inclure et limiter la capacité du personnel et les ressources. À moins que la résilience se développe, des années d'investissement dans la santé pourraient être inversées. En dépit de sa croissance importante, il y a peu de recherches disponibles qui montrent comment les systèmes de santé résilients sont construits et ce qui contribue à la résilience. Une proposition visant à améliorer la résilience des systèmes de santé est un partenariat plus efficace entre les acteurs du système de santé.

Les prestataires non étatiques demeures les systèmes de santé importants malgré d'énormes investissements dans le secteur public. Ils continuent à fournir des services essentiels, y compris les soins de santé primaires dans de nombreux pays à revenu faible et moyen. Les prestataires de santé confessionnels non étatiques sont un groupe qui maintient une forte présence en Afrique. Ils ont démontré plusieurs compétences dans la prestation de santé, y compris la préférence pour servir les pauvres en milieu rural, une approche globale de la communauté à la santé, et l'approvisionnement des services au cas où les services gouvernementaux ne sont pas disponibles. Les prestataires de santé confessionnels non étatiques peuvent donc avoir des compétences uniques qui contribuent à maintenir de bons résultats pour la santé en cas de chocs inattendus et des demandes en cours sur les systèmes de santé. Cependant, peu de recherches jusque-là ont été menées sur la manière dont les prestataires de santé confessionnels non étatiques contribuent au système de santé à partir d'une perspective de résilience.

Cette étude a pour but d'explorer et de décrire la manière par laquelle les prestataires de santé non étatiques contribuent aux systèmes de santé résilients. Les résultats sont attendus pour contribuer à la compréhension de la nature et des stratégies potentielles pour renforcer la résilience à travers des partenariats.

Question : Comment les prestataires de santé confessionnels non étatiques contribuent-ils aux systèmes de santé résilients en Afrique ?

Approche : Cette étude multi- cas sera divisée en deux phases. La première phase exploratoire identifiera les expériences pertinentes. La seconde phase développera les 3 études de cas identifiées à la première phase.

La proposition d'étude de cas : La proposition principale de l'étude de cas est que les prestataires de santé confessionnels non étatiques contribuent d'une manière ou d'une autre aux systèmes de santé résilients en vertu de leur mission et des opérations en Afrique. Beaucoup de prestataires de santé confessionnels non étatiques ont été présents depuis des décennies; cette présence permanente à travers les temps des réformes et des changements massifs dans leur contexte d'exploitation doit avoir présenté des cas où les prestataires de santé confessionnels non étatiques ont soutenu les systèmes de santé de continuer à fournir de bons services en matière de santé au milieu des menaces. Peut-être il y a quelque chose d'inhérent à leur mission ou la structure de leurs opérations qui permettent de renforcer la résilience. Etant un modèle de recherche flexible, cette proposition a la possibilité de subir des changements si d'autres propositions émergent tout au long de l'étude.

Calendrier :

- De Mai à Juin 2016 – Phase 1: Présentation et enquête brève des membres de ACHAP
- De Juin 2016 – Phase 2: Développent d'études de cas à travers les entretiens avec des informateurs clés ainsi que la revue de la littérature
- De Juillet à Aout 2016 : Analyse des cas, et suivi s'il est nécessaire
- De Septembre à Octobre : Consolidation de rapport, et autre consultation s'il est nécessaire

Pour plus d'information, veuillez contacter :

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Cette étude est soutenue conjointement par le 'Health Policy and Systems Division' (University of Cape Town), le 'International Religious Health Assets Program (IRHAP)', et ACHAP (the African Christian Health Associations Platform).

Appendix B: Phase 1 - ACHAP Member Survey and Consent Form

A brief, 20-minute survey with the consent form in a Microsoft Word document will be sent to all members of the ACHAP network and their member organisations via email along with Appendix A. This is a draft format of the survey that will be sent out. The survey questions might be refined after the initial review phase has been completed (although major changes are not expected). The updated survey form will be submitted to HREC as an Addendum.

RAPID SURVEY - ENGLISH

The contribution of non-state faith-based health providers to health systems resilience in Africa

University of Cape Town, Health Policy and Systems Research Division – in support of the African Christian Health Associations Platform (ACHAP)

Dear participant,

Thank you for taking the time to participate in this study. My name is Jolly Ann Maulit and I am a researcher on a study that seeks to understand how non-state faith-based health providers (FBHPs) contribute to resilient health systems in Africa. This study is being conducted out of the School of Public Health and Family Medicine at the University of Cape Town (UCT) as part of a Master's thesis in Public Health (MPH). These study results will enable improved understanding and increased acknowledgement of the role of FBHPs in health systems, and provide potential recommendations for areas that may require further development and research. We anticipate that the findings would be of use to members of the ACHAP network.

The study findings will be disseminated to all members of the ACHAP network via an article that will be written as part of the Masters in Public Health thesis requirements. If possible, the paper will also be submitted to relevant academic journals and the findings presented at conferences. There is also potential to present the study findings to a global audience at the upcoming Health Systems Global Symposium to be conducted in November 2016, where the theme is Resilient and Responsive Health Systems.

The study will involve 2 phases of inquiry. Phase 1 is this survey, which seeks to get an overview of your experience with regards to different health systems threats (shocks). After a review of the responses from the first phase, 3 experiences will be selected and their participation requested in Phase 2. The second phase will involve in-depth interviews and sharing of key documents to support the development of 3 case studies that describe how FBHPs contribute to health systems resilience. We will be in touch with you directly should your experience be selected for participation in Phase 2.

It is expected that participation in Phase 1 of this study will involve no more risk than one would encounter on a daily basis. Please note that no reimbursement will be provided for your participation, though your time and participation will be most appreciated. Your participation is voluntary, and will only take 20 minutes of your time. All information submitted will be kept confidential and anonymized in any resulting publications, reports or presentations.

Should you provide consent for your participation in this phase of the study (Phase 1), please place your signature below, and fill out the survey that follows. Please submit both the consent form and the survey responses to Mike Mugweru, Chair of the ACHAP Secretariat. If you have questions regarding this research, or if you would like to fill out the survey electronically (via the Internet), please do not hesitate to contact me via email (contact details below).

Thank you in advance for your support.

Jolly Ann Maulit
Candidate - Master's of Public Health; researcher

For more information, please contact:

Dr. Jill Olivier	Ms. Jolly Ann Maulit	Mr. Mike Mugweru
Senior Lecturer and Research	Researcher	ACHAP

Coordinator
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chas@chak.or.ke

By including my signature below, I declare that I am a representative of an active member in the ACHAP network. I am over 18 years of age and voluntarily consent to participate in this study on the contribution of FBHPs to resilient health systems out of UCT. The purpose of the study has been explained to me and I understand that my identity will be kept confidential and anonymized in any resulting publications, reports or presentations

_____
Signature

This study is supported by the Health Policy and Systems Division (University of Cape Town) and the International Religious Health Assets Program (IRHAP) – and is conducted in coordination with the African Christian Health Association Platform (ACHAP).

The broader study into which this survey feeds has been reviewed and approved by The Human Research Ethics Committee, Health Sciences Faculty, University of Cape Town. You have a right to contact the Faculty of Health Sciences Human Research Ethics Committee (HREC) at UCT if you have any questions or concerns about your participation in this research.

Human Research Ethics Committee of the Health Sciences Faculty

University of Cape Town, The Faculty of Health Sciences, Human Research Ethics Committee, E 52, Room 24, Old Main Building, Groote Schuur Hospital, Observatory, 7925, South Africa

Telephone: +27 21 406 6492 Fax: +27 21 406 6411

Email: shahieda.amardien@uct.ac.za

RAPID SURVEY

Name and Surname _____
(for further correspondence only, no names will be used in any reporting)

Position _____

Name of Organisation _____

Country of Operation _____

No. of years of CHA members have operated in country _____

Contact email _____

1. During the time that CHA members have operated in your country, have any of the following shocks or stressors occurred? Please check all boxes that are applicable in the columns.

Type of Health System Shock or Stress	Yes, in the last 50 years	Yes, in the last 10 years
Natural disaster (e.g. floods, drought, earthquakes)		
Conflict/War		
Economic Crises		
Short-term health epidemic (e.g. Ebola or other short outbreaks)		
Prolonged health epidemic (e.g. HIV/AIDS)		
Severe human resource challenges (in numbers and skills)		
Severe financial resource shortages		
Political, leadership or regime changes		
Health sector reforms (e.g. changes in health policies, in health financing policies)		
Other shock or stressor not included above – please briefly describe:		

2. For the experiences indicated in Question 1, please provide a brief description, and if possible the dates/years during which they occurred; if it is an ongoing stressor, please indicate this. If multiple experiences were indicated, please describe the top 3 most significant stressors or shocks.

3. For each of the experiences described in Question 2, can you think of specific strategies implemented by CHA members to overcome the shock or stressor? If yes, please describe.

4. Could you describe a situation where CHA members have contributed to national health system resilience in your country of operation? If yes, please describe.

5. Do the health facilities in your CHA operate as a resilient 'system' – or do they 'sink or swim' on their own? (e.g. if a hospital has a financial crisis, who would they go to?). Please elaborate by providing details.

6. Please circle on the scale below the resilience of the health facilities of CHA members.

1	2	3	4	5

1 = Not resilient 5 = very resilient

Please describe the reason for your ranking.

Thank you for your time! Should your experience be found appropriate for Phase 2 of the research (descriptive case study development), we will be in contact directly via email. We will communicate findings directly to respondents' emails, and they will also be circulated by the ACHAP Secretariat.

ENQUÊTE RAPIDE

La contribution des prestataires de santé confessionnels non étatiques aux systèmes de santé résilience en Afrique

Université du Cap, Division des systèmes et des politiques de santé, – avec l'appui de la « African Christian Health Association Platform» (ACHAP)

Cher participant,

Merci pour votre participation à cette enquête. Je m'appelle Jolly Ann Maulit et je mène une étude qui cherche à comprendre comment les prestataires de santé confessionnels non étatiques (FBHPs) contribuent aux systèmes de santé résilients en Afrique. Cette étude entre dans le cadre de la thèse de master en santé publique de l'école de santé publique et de médecine familiale de l'Université du Cap. Les résultats de cette étude permettront une meilleure compréhension et une plus grande reconnaissance du rôle des FBHPs dans les systèmes de santé, et fourniront des recommandations potentielles pour les zones qui peuvent nécessiter la poursuite du développement et de la recherche. Nous prévoyons que les résultats seraient utiles aux membres du réseau ACHAP.

Les résultats de cette étude seront diffusés à tous les membres du réseau ACHAP via un article qui sera écrit dans le cadre de la thèse de master en santé publique. Si possible, les résultats de cette étude seront également soumis à des revues universitaires pertinentes et présentés lors de conférences. Il est également possible de présenter les résultats de cette étude à un public mondial lors du prochain Colloque international qui aura lieu en novembre 2016, dont le thème est des systèmes de santé résilients et réactifs.

L'étude comprendra 2 phases. La phase 1 est cette enquête, qui cherche à obtenir un aperçu de votre expérience en ce qui concerne les différentes menaces des systèmes de santé (chocs). Après un examen des réponses de la première phase, 3 expériences seront sélectionnées et leur participation sera demandée dans la phase 2. La deuxième phase comprendra des interviews profondes et le partage de documents clés pour soutenir le développement des trois études de cas qui décrivent comment les FBHPs contribuent aux systèmes de santé de la résilience. Nous entrerons directement en contact avec vous si vous avez de l'expérience pour participer à la phase 2.

Il est prévu que la participation à la phase 1 de cette étude impliquera plus de risque que l'on pourrait rencontrer quotidiennement. S'il vous plaît noter qu'aucune gratification ne vous sera accordée pour votre participation, bien que votre temps et votre participation soient les plus appréciés. Votre participation sera volontaire, et ne prendra que 20 minutes de votre temps. Toutes les informations fournies seront gardées confidentielles et anonymisées dans les publications, les rapports ou présentations résultants.

Si vous donner votre consentement pour participer à cette phase de l'étude (Phase 1), s'il vous plaît signez ci-dessous, et remplissez le questionnaire qui suit. S'il vous plaît soumettez à la fois le formulaire de consentement et les réponses au sondage à Mike Mugweru du ACHAP. Si vous avez des questions concernant cette recherche, ou si vous voulez faire cette enquête par voie électronique (sur Internet), s'il vous plaît n'hésiter pas de me contacter via e-mail (coordonnées disponibles ci-dessous).

Merci d'avance pour votre aide.

Jolly Ann Maulit (*Candidate - Master en santé publique; chercheuse)*

Pour plus d'information, s'il vous plaît contacter :

Dr. Jill Olivier
Maître de conférences et
Coordinatrice de la recherche

Division des systèmes et des politiques de santé, École de santé publique et de médecine familiale, Faculté des sciences de la santé, Université du Cap
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Ms. Jolly Ann Maulit
Chercheuse

Division des systèmes et des politiques de santé, École de santé publique et de médecine familiale, Faculté des sciences de la santé, Université du Cap

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Mr. Mike Mugweru
ACHAP

P.O. Box 30690, GPO Nairobi, KENYA,
+254 (02)4441920/4445160

http://www.africachap.org
chas@chak.or.ke

En incluant ma signature électronique ci-dessous, je déclare que je suis un représentant ou une membre actif du réseau ACHAP. Je suis âgé de plus de 18 ans et consens volontairement à participer à cette étude sur la contribution des FBHPs aux systèmes de santé résilients à UCT. Le but de l'étude m'a été expliqué et je comprends que mon identité sera gardée confidentielle et anonymisées dans toutes les publications, rapports ou présentations résultants.

_____
Signature

Cette étude est soutenue par la Division des Systèmes Politiques de Santé (Université du Cap) et le Programme International des atouts religieux de santé (IRHAP) - et est menée en coordination avec « African Christian Health Association Platform » (ACHAP).

L'étude plus large dans laquelle cette enquête est basée a été examinée et approuvée par le Comité éthique de la recherche humaine, de la faculté des Sciences de la santé de l'Université du Cap. Vous avez le droit de contacter le Comité éthique de la recherche humaine (HREC) de UCT si vous avez des questions ou des préoccupations au sujet de votre participation à cette recherche.

La Faculté des sciences de la santé Comité d'éthique de la recherche humaine (HREC)
Université du Cap (University of Cape Town)
E 52, Room 24, Old Main Building, Groote Schuur Hospital,
Observatory, 7925, South Africa
Telephone: +27 (0) 21406 6492 | Fax: +27 (0) 21406 6411
Email:shahieda.amardien@uct.ac.za

ENQUÊTE RAPIDE

Nom et prénom _____
(Pour correspondance seulement, aucun nom ne sera utilisé dans tous les rapports)

Position _____

Nom de l'organisation _____

Pays d'Opération _____

Nombre d'années que les membres de l'Association de Santé Christian (CHA) ont opéré dans le pays
_____

Adresse Email _____

1. Pendant le temps que les membres du CHA ont opéré dans votre pays, est-ce que les chocs ou système de stress suivant sont apparus? S'il vous plaît cochez toutes les cases qui sont applicables dans les colonnes.

Type de choc du système de santé ou de stress	**Oui, au cours des 50 dernières années**	**Oui, au cours des 10 dernières années**
Catastrophe naturelle (par exemple les inondations, la sécheresse, les tremblements de terre)		
Conflit / Guerre		
Crise économique		
Épidémie de santé à court terme (par exemple Ebola et d'autres courtes épidémies)		
L'épidémie de santé prolongée (par exemple le VIH / SIDA)		
Problèmes graves de ressources humaines (en nombres et compétences)		
De graves pénuries de ressources financières		
Politique, leadership ou changements de régime		
Les réformes du secteur de santé (par exemple changements dans les politiques de santé ou les politiques de financement de la santé)		
Autres chocs ou stress non inclus ci-dessus - s'il vous plaît décrivez brièvement:		

2. Pour les expériences indiquées dans la question 1, s'il vous plaît fournissez une brève description, et si possible les dates / années pendant lesquelles elles se sont produites; si c'est un facteur de stress en cours, s'il vous plaît précisez. Si plusieurs expériences ont été indiquées, s'il vous plaît décrivez les 3 principaux facteurs de stress ou chocs.

3. Pour chacune des expériences décrites dans la question 2, pouvez-vous vous rappelez des stratégies spécifiques mises en œuvre par les membres du CHA pour surmonter le choc ou le stress? Si oui, s'il vous plaît décrivez.

4. Pouvez-vous décrire une situation où les membres du CHA ont contribué à la résilience du système national de santé dans votre pays d'opération? Si oui, s'il vous plaît décrivez.

5. Est-ce que les établissements de santé dans votre CHA opèrent comme un «système» résilient – ou ils «coulent ou nagent» d'eux-mêmes? (Par exemple si un hôpital a une crise financière, à qui vont-ils s'adresser?). S'il vous plait élaborez en fournissant des détails.

6. S'il vous plaît encercler sur l'échelle ci-dessous les établissements de résilience de santé membres du CHA.

1	2	3	4	5

1 = Pas résilient 5 = très resilient

S'il vous plaît décrivez brièvement la raison de votre classement.

Merci pour votre temps! Votre expérience devrait-elle être jugée appropriée pour la phase 2 de la recherche (développement de l'étude de cas descriptive), nous vous contacterons directement par courriel. Nous allons communiquer les résultats directement aux e-mails des personnes interrogées, et ils seront également diffusés par le Secrétariat d'ACHAP.

Appendix C: Phase 2 - Case study consent form: Survey respondent/ACHAP member
To be sent to selected participants and returned to the researcher prior to scheduling the telephone interview.

Dear participant,

Thank you for taking the time to participate in this study. My name is Jolly Ann Maulit and I am a researcher for a study that seeks to understand how ***non-state faith-based health providers (FBHPs) contribute to resilient health systems in Africa***. This study is being conducted out of the School of Public Health and Family Medicine at the University of Cape Town (UCT) as part of a Master's thesis in Public Health (MPH). These study results will enable improved understanding and increased acknowledgement of the role of FBHPs in health systems, and provide potential recommendations for areas that may require further development and research. We anticipate that the findings would be of use to members of the ACHAP network.

The study findings will be disseminated to all members of the ACHAP network via an article that will be written as part of the Masters in Public Health thesis requirements. If possible, the paper will also be submitted to relevant academic journals and the findings presented at conferences. There is also potential to present the study findings to a global audience at the upcoming Health Systems Global Symposium to be conducted in November 2016, where the theme is Resilient and Responsive Health Systems.

The study involves 2 phases of inquiry. As you are aware, Phase 1 was a survey that sought to get an overview of your experience with regards to different health systems threats (shocks). After a review of the responses from the first phase, your experience was identified as a case that will provide deeper understanding on the research topic and therefore your participation in Phase 2 of the study is requested. Phase 2 will involve a telephone or Skype interview, and we will also request for any relevant documents regarding your experience to be shared with the researcher prior to the interview. We will also request for you to support us in identifying 2-4 other key informants who can provide insights to the experience you identified; we will also request their participation in this phase of the study to improve our understanding of the case.

Participation in this the case study development is ***voluntary***, and will only take *a maximum* ***of 1.5 hours*** of your time. The interview is expected to take approximately one hour, and some additional time may be requested of you to share additional documents via email that will enable the researcher to gain a deeper understanding of the case. All information submitted including your identity will be kept ***confidential.*** Your identity as a key informant will also be anonymized in the analysis and in any reports, publications or presentations that arise from this research. Since it is important that these cases are understood in their health systems context, the country that you operate in will likely be identified in the case report, so the identity of your organisation may be guessed by readers (and in some cases, when prior approval has been gained from respondents, the organisation might be directly named). The researcher and study advisors will make all attempts to minimize any risk that may arise, and will provide opportunities for comment from respondents before publication.

Should you provide consent for your participation in this phase of the study (Phase 2), please place your electronic signature on this form and send it back to mltjol001@myuct.ac.za by (date to be inserted). After you have sent it back I will be in touch with you directly to arrange an interview date and time at your convenience. If you have questions regarding this research, please do not hesitate to contact me via email.

Thank you in advance for your support.
All the best,

Jolly Ann Maulit
Candidate – Master's of Public Health; researcher

_____

By signing below, I declare that I am over 18 years of age and voluntarily consent to participate in this study on the contribution of FBHPs to resilient health systems out of UCT. The purpose of the study has been explained to me and I understand that my identity will be kept confidential and anonymized in any resulting publications, reports or presentations.

_____
Signature

Contact Details

The Faculty of Health Sciences Human Research Ethics Committee
University of Cape Town
E 52, Room 24, Old Main Building, Groote Schuur Hospital,
Observatory, 7925, South Africa
Telephone: +27 (0) 21406 6492 | Fax: +27 (0) 21406 6411
**You have a right to contact the Faculty of Health Sciences Human Research Ethics Committee (HREC) at UCT if you have any questions or concerns about your participation in this research.*

Student Supervisor
Dr. Jill Olivier
Health Policy and Systems Division, School of Public Health and Family Medicine
Faculty of Health Sciences, University of Cape Town,
Anzio Road, Observatory, 7925, South Africa
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Appendix D: Phase 2 - Case study consent form: Participants identified via Snowballing
To be sent to identified participants and returned to the researcher prior to scheduling the telephone interview.

Dear participant,

My name is Jolly Ann Maulit and I am a researcher for a study that seeks to understand how ***faith-based organisations (FBHPs) contribute to resilient health systems in Africa***. This study is being conducted out of the School of Public Health and Family Medicine at the University of Cape Town (UCT) as part of a Master's thesis in Public Health (MPH). These study results will enable improved understanding and increased acknowledgement of the role of FBHPs in health systems, and provide potential recommendations for areas that may require further development and research. We anticipate that the findings would be of use to members of the African Christian Health Associations Platform (ACHAP) network and others working in strengthening health systems.

The study findings will be disseminated to all members of the ACHAP network and yourself as a participant via an article that will be written as part of the Masters in Public Health thesis requirements. If possible, the paper will also be submitted to relevant academic journals and the findings presented at conferences. There is also potential to present the study findings to a global audience at the upcoming Health Systems Global Symposium to be conducted in November 2016, where the theme is Resilient and Responsive Health Systems.

The study involves 2 phases of inquiry. Phase 1 was a survey that sought to get an overview of FBHP experience with regards to different health systems threats (shocks). After a review of the responses from the first phase, the experience of (description of experience to be inserted) was identified as a case that will provide deeper understanding on the research topic. You were identified by (name of survey respondent to be entered) as a potential key informant to provide more insight into this experience. I would therefore like to request your participation in Phase 2 of the study. Phase 2 will involve a telephone or Skype interview, and we will also request for any relevant documents regarding your experience to be shared with the researcher.

Participation in this the case study development is ***voluntary***, and will only take *a maximum* ***of 1.5 hours*** of your time. The interview is expected to take approximately one hour, and some additional time may be requested of you to share additional documents via email that will enable the researcher to gain a deeper understanding of the case. All information submitted including your identity will be kept ***confidential.*** Your identity as a key informant will also be anonymized in the analysis and in any reports, publications or presentations that arise from this research. Since it is important that these cases are understood in their health systems context, the country that you operate in will likely be identified in the case report, so the identity of your organisation may be guessed by readers (and in some cases, when prior approval has been gained from respondents, the organisation might be directly named). The researcher and study advisors will make all attempts to minimize any risk that may arise, and will provide opportunities for comment from respondents before publication.

Should you provide consent for your participation in this phase of the study (Phase 2), please place your electronic signature on this form and send it back to mltjol001@myuct.ac.za by (date to be inserted). After you have sent it back I will be in touch with you directly to arrange an interview date and time at your convenience. If you have questions regarding this research, please do not hesitate to contact me via email.

Thank you in advance for your support.

All the best,

Jolly Ann Maulit
Candidate – Master's of Public Health; researcher

_____
By signing below, I declare that I am over 18 years of age and voluntarily consent to participate in this study on the contribution of FBHPs to resilient health systems out of UCT. The purpose of the study has been explained to me and I understand that my identity will be kept confidential and anonymized in any resulting publications, reports or presentations.

_____
Signature

Contact Details

The Faculty of Health Sciences Human Research Ethics Committee
University of Cape Town
E 52, Room 24, Old Main Building, Groote Schuur Hospital,
Observatory, 7925, South Africa
Telephone: +27 (0) 21406 6492 | Fax: +27 (0) 21406 6411
**You have a right to contact the Faculty of Health Sciences Human Research Ethics Committee (HREC) at UCT if you have any questions or concerns about your participation in this research.*

Student Supervisor
Dr. Jill Olivier
Health Policy and Systems Division, School of Public Health and Family Medicine
Faculty of Health Sciences, University of Cape Town,
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Student Researcher
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267 Victoria Road, Durham Square (Unit 406)
Salt River, 7925, South Africa
Cell: +27 (0) 630589113 | Email: mltjol001@myuct.ac.za

Appendix E: Phase 2 - Interview guide for case studies

The interview will be conducted via telephone or Skype where possible. At this stage, the participant would have already sent a signed copy of the consent form in Appendix C or D back to the researcher (depending on the type of participant). While scheduling the interview, the researcher will request the participant to choose a private room for the interview where the they cannot be overheard, and assure the participant that the researcher will do the same. Prior to starting the interview, the researcher will introduce themselves and provide details regarding the purpose of this phase of the study. They will also respond to any questions the interviewee may have. Thereafter, verbal consent will be requested once more prior to starting the interview.

Guiding questions

To be asked in a semi-structured, open ended format; participants will be prompted for more details as needed. Some questions may vary or become more specific based on information gathered from the desk review.

1. Please describe the type of work your organisation does in your country of operation.

2. Please tell me more about your role and how long you've been working with this organisation? How long have you worked in the country, and in what capacity?

3. Please tell me about the health system context in your country, in the past and at present. How is it set up/what is the architecture? What is the mix of public and private partners?

4. Please describe your experience indicated in Phase 1 of the study, of the threat that the health system faced.

5. During the time of threat, what was the role of your organisation in providing health services? What were some of the results from you playing this role? What enabled your organisation to play these roles during these times of crises?

6. What other threats in the form of shocks or stressors did the health system face? Please expand on these, and also the role of your organisation during these times.

7. Please tell me more about how your organisation is set-up. Where do you get your funding sources? What is the level of decentralisation and flexibility that you have? What are your mission and values? How is the governance system set up? What are the key partnerships that you have? What are your key assets?

8. What is the role of your organisation in the health sector? What are the key capacities you require to play this role?

9. What is the relationship of your organisation with government? How do you interact with government? How has this relationship changed over time? What are the benefits of this relationships? What are the challenges with this relationship?

10. What is your perception on how your organisation has supported the resilience of the national health system?

11. Is there anything else you would like to share with me regarding this topic?

Thank you for your time! I will be in touch should there be need to follow-up for clarification or for additional documentation that will contribute to our understanding of how FBHPs contribute to health systems resilience. An announcement will be made through the ACHAP Secretariat when the findings of this study are available.

Appendix F: UCT Ethics Approval Letter

UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee

Room E52-24 Old Main Building
Groote Schuur Hospital
Observatory 7925
Telephone [021] 406 6626
Email: shuretta.thomas@uct.ac.za
Website: www.health.uct.ac.za/fhs/research/humanethics/forms

08 April 2016

HREC REF: 205/2016

Dr J Olivier
Public Health & Family Medicine
Room 1.36
Falmouth Building

Dear Dr Olivier

PROJECT TITLE: THE CONTRIBUTION OF NON-STATE FAITH-BASED HEALTH PROVIDERS TO HEALTH SYSTEMS RESILIENCE IN AFRICA (MASTERS CANDIDATE - MS J MAULIT)

Thank you for your response to the Faculty of Health Sciences Human Research Ethics Committee.

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

Approval is granted for one year until the 30th April 2017.

The HREC acknowledge that the following Masters candidate, Ms J Maulit, is also involved in this study.

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.
(Forms can be found on our website: www.health.uct.ac.za/fhs/research/humanethics/forms)

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate institutional approval before the research may occur.

Please quote the HREC REF in all your correspondence.

Yours sincerely

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN RESEARCH ETHICS COMMITTEE
Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938
This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical

Appendix G: Journal Style Guide

INFORMATION FOR AUTHORS
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Specific objectives are to:

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- Ensure wide geographical coverage of papers including coverage of the poorest countries and those in transition;
- Encourage and support researchers from low- and middle-income countries to publish in *HPP*;
- Ensure papers reflect a broad range of disciplines, methodologies and topics;
- Ensure that papers are clearly explained and accessible to readers from the range of disciplines used to analyse health systems and policies; and
- Provide a fair, supportive and high quality peer review process.

Health Policy and Planning welcomes submissions of the following types: original articles, review papers, methodological musings, research in practice, commentaries, and papers in our series 'How to do (or not to do)...' [for example, see Hutton and Baltussen, HPP, 20(4): 252-9] and '10 best resources' [for example, see David and Haberlen, HPP, 20(4): 260-3].

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- original articles
- review papers
- methodological musings
- research in practice
- commentaries
- papers in our series 'How to do (or not to do)...' [for example, see Hutton and Baltussen, HPP, 20(4): 252-9] and
- '10 best resources' [for example, see David and Haberlen, HPP, 20(4): 260-3].

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Manuscripts should preferably be a maximum of 6000 words, excluding tables, figures/diagrams and references.

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- Each author's affiliation and qualifications;
- Keywords and an abbreviated running title;
- 2-4 Key Messages, detailing concisely the main points made in the paper;
- Acknowledgements
- A word count of the full article.

The manuscript will generally follow through sections: Abstract (no more than 300 words), Introduction, Methods, Results, Discussion, Conclusion, References. However, it may be appropriate to combine the results and discussion sections in some papers. Tables and Figures should not be placed within the text, rather provided in separate file/s.

In the **acknowledgements**, all sources of funding for research must be explicitly stated, including grant numbers if appropriate. Other financial and material support, specifying the nature of the support, should be acknowledged as well.

Figures should be designed using a well-known software package for standard personal computers. If a figure has been published earlier, acknowledge the original source and submit written permission from the copyright holder to reproduce the material. Colour figures are permitted but authors will be required to pay the cost of reproduction.

All **measures** should be reported in SI units, followed (where necessary) by the traditional units in parentheses. There are two exceptions: blood pressure should be expressed in mmHg and haemoglobin in g/dl. For general guidance on the International System of Units, and some useful conversion factors, see 'The SI for the Health Professions' (WHO 1977).

Statistics:

For the reporting of statistical analyses please consider the following additional points:

- Focus the statistical analysis at the research question.
- Report simple analyses first, then only more sophisticated results.
- Provide information about participation and missing data.
- As much as possible, describe results using meaningful phrases (E.g., do not say "beta" or "regression coefficient", but "mean change in Y per unit of X"). Provide 95% confidence intervals for estimates.
- Report the proportions as N (%), not just %.
- Report p values with 2 digits after the decimal, 3 if <0.01 or near 0.05. E.g., 0.54, 0.03, 0.007, <0.001, 0.048. Do not report p values greater than 0.05 as "NS".
- Always include a leading zero before the decimal point (e.g., 0.32 not .32).
- Do not report tests statistics (such as chi-2, T, F, etc)."

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Manuscript file must include text body. Title Page, Figures and Tables should be uploaded separately.

Manuscript Preparation:

- Page 1: Title Page - please keep as concise as possible and ensure it reflects the subject matter;

- Corresponding author's name, address, telephone/fax numbers and e-mail address;
- Each author's affiliation and qualifications;
- Keywords and an abbreviated running title;
- 2-4 Key Messages, detailing concisely the main points made in the paper;
- Acknowledgements
- A word count of the full article.

Page 2: Abstract

Abstract should be prepared in one paragraph, with a limit of 300 words. No headings are required. It should describe the purpose, materials and methods, results, and conclusion in a single paragraph no longer than 300 words without line feeds.

Page 3: Introduction

The Introduction should state the purpose of the investigation and give a short review of the pertinent literature, and be followed by:

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All **measures** should be reported in SI units, followed (where necessary) by the traditional units in parentheses. There are two exceptions: blood pressure should be expressed in mmHg and haemoglobin in g/dl. For general guidance on the International System of Units, and some useful conversion factors, see 'The SI for the Health Professions' (WHO 1977).

References:
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