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Claire Somerville & Khatia Munguambe

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The rise of non-communicable disease (NCDs) in Mozambique: decolonising gender and global health

Claire Somerville and Khatia Munguambe

ABSTRACT

Health and gender are two significant areas of the global development system. They share entangled epistemological histories typically drawn from the global North. We examine how these global entanglements of gender in global health act to veil local epistemologies and explanatory systems of understanding of disease, simultaneously advancing and complicating local responses to the changing epidemiological burdens in Mozambique. This paper draws on research from Mozambique conducted as part of a large three-country study of the double burden of disease. We focus in this paper on the connected conditions of hypertension and stroke. The research was conducted in areas that have faced a double burden of disease: the persistence of diseases that attract international intervention, where community-based health centres are sometimes referred to as ‘Global Fund’ clinics, and a new burden of non-communicable disease (NCDs). The reach and penetration of particular sets of knowledge derived somewhat from the global North have been accompanied by particular renderings of gender that have brought with them social constructivist theorising that eschews non-Western configurations of sex and gender in the context of illness, disease, and well-being. Drawing on critical African gender studies, we begin to re-examine global health and its epistemological assumptions about disease presentation and explanatory models. Such discussion is necessary to engage in calls to de-colonise global health, as well as the mainstreaming of gender in global health. Reflecting on measures to decolonise feminisms and ensuring that African feminisms inform future gendered understanding and programming around NCDs should be central to responses to the new onslaught and double burden of NCDs across Mozambique and sub-Saharan Africa more widely.

La santé et le genre sont deux domaines importants du système de développement mondial. Ils partagent des histoires épistémologiques intimement liées, provenant en général de l’hémisphère Nord. Nous examinons comment cet « enchevêtrement » du genre dans la santé à l’échelle mondiale a pour effet de voiler les épistémologies locales et les systèmes explicatifs permettant de comprendre les maladies ; il a pour effet simultané de faire progresser et de compliquer les réponses locales aux charges épidémiologiques en évolution au Mozambique. Ce document s’appuie sur des recherches menées au Mozambique

KEYWORDS

Mozambique; gender; global health; non-communicable diseases (NCDs); stroke; decolonisation

dans le cadre d'une vaste étude sur la double charge de morbidité dans trois pays (Beran et al. 2019 ; Beran et al. 2016). Dans cet article, nous nous concentrons sur les problèmes associés que sont l'hypertension et les AVC (accidents vasculaires cérébraux). Les recherches ont été menées dans des zones confrontées à une double charge de morbidité : la persistance de maladies qui font l'objet d'interventions internationales, où les centres de santé communautaires sont parfois appelés dispensaires du « Fonds mondial », et une nouvelle charge de morbidité de maladies non transmissibles (MNT). La portée et la pénétration d'un ensemble particulier de connaissances provenant au moins en partie de l'hémisphère Nord se sont accompagnées de représentations particulières du genre qui ont introduit avec elles des théories sociales constructivistes évitant les configurations non occidentales du sexe et du genre dans le contexte de la maladie, de la maladie et du bien-être. En nous appuyant sur des études africaines critiques sur le genre, nous commençons à réexaminer la santé mondiale et ses hypothèses épistémologiques sur la présentation des maladies et les modèles explicatifs. Il est nécessaire de mener une discussion de ce type pour lancer des appels à la décolonisation de la santé mondiale, ainsi qu'à l'intégration de la dimension de genre dans la santé mondiale (Büyüm et al. 2020). La réflexion sur les mesures visant à décoloniser les féminismes (Lazreg 2005) et les efforts pour faire en sorte que les féminismes africains éclairent la compréhension et la programmation sexospécifiques futures autour des MNT devraient être au cœur des réponses à la nouvelle attaque et au double fardeau des MNT au Mozambique et en Afrique subsaharienne en général.

La salud y el género son dos áreas importantes en el sistema de desarrollo global. Ambos comparten historias epistemológicas enredadas que suelen provenir del Norte global. En el presente estudio examinamos cómo estos enredos de género y salud a nivel mundial actúan ocultando las epistemologías locales y los sistemas explicativos que permiten la comprensión de las enfermedades; además, simultáneamente, dichos enredos avanzan y complican las respuestas locales a las cambiantes cargas epidemiológicas existentes en Mozambique. Este artículo recurre a investigaciones realizadas en el país como parte de un gran estudio que abarca tres países para indagar sobre la doble carga que representan las enfermedades (Beran *et al.* 2019; Beran *et al.* 2016). En particular, nos centramos en las condiciones interconectadas de la hipertensión y el accidente cerebrovascular. La investigación se llevó a cabo en zonas que han enfrentado una doble carga de enfermedad: la persistencia de enfermedades que atraen la intervención internacional, donde a veces los centros de salud comunitarios son denominados clínicas del "Fondo Mundial", y una nueva carga de enfermedades no transmisibles (ENT). El alcance y la penetración de un conjunto particular de conocimientos provenientes en cierto modo del Norte global se han acompañado de interpretaciones particulares sobre el género. Estas conllevan una teorización social constructivista que soslaya las configuraciones no occidentales del sexo y el género en un contexto tanto de enfermedad como bienestar. A partir de estudios críticos de género realizados en África, reexaminamos la salud a nivel mundial y sus supuestos epistemológicos sobre la presentación de enfermedades y los modelos explicativos. Consideramos necesaria esta discusión, pues a partir del debate pueden formularse llamados a la descolonización y la integración del género en la salud mundial (Büyüm *et al.* 2020). Debería ser fundamental reflexionar en torno a

medidas que permitan descolonizar los feminismos (Lazreg 2005) y garantizar que los feminismos africanos contribuyan a la comprensión y la programación futuras, basadas en el género, en torno a las ENT. Lo anterior también debe orientarse a responder a la nueva arremetida y la doble carga representada por las ENT para Mozambique y el África subsahariana en general.

Introduction

‘It’s a gender thing – it’s Global Fund!’, exclaimed a colleague as we visited a primary health-care centre in a peri-urban area outside Maputo as part of a research study of non-communicable disease (NCDs) in Mozambique. The close association of donor health-system funding and gender equality initiatives, often stemming from the United Nations (UN) and other global health actors, was an often-repeated framing of discussions about health service provision in Mozambique. As two giants of the global development system, global health and gender share entangled epistemological histories and, more recently, shared implementation agendas that do not always address the reproduction of gender norms across health systems (Percival *et al.* 2018).

The health centre we were visiting, like many others, did indeed have programmes, supplies, and resources directly funded as part of the US\$515 million 2018–2020 Global Fund round of investment in Mozambique to support efforts to reduce rates of mortality and morbidity from malaria, tuberculosis, and HIV/AIDS by 40 per cent. The staggering financial investment in three high-burden diseases of international health interest contrasts starkly with the lack of national or global financial or political interest around NCDs in Mozambique. The NCD Department of the *Ministério da Saúde* (MISAU) Mozambique has a budget that barely reaches US\$100,000 per year (Pfeiffer and Chapman 2019; Silva-Matos and Beran 2012), and a four-member staff team to address the rising burden of NCDs accounting for 32 per cent of total mortality (Riley *et al.* 2017). External donor funding contributes three-quarters of the total Mozambican health budget, but this is typically earmarked and has not yet impacted service provision for NCDs. That Mozambique’s national health priorities are somewhat determined by international global health actors and donors is widely noted (Pfeiffer and Chapman 2019). The issue of international health agendas shaping national-level systems is an issue taken up by *The Lancet* in the context of the need to end colonialist global health tendencies (Horton 2013, 2019). These tendencies, we argue, are not only financial or political, but also epistemological, drawing on sets of knowledge that are typically rooted in the global North. Global health and its closely related gender activities are not just a matter of budgets and funding streams, but also ways of knowing and doing that are typically drawn from epistemologies of the global North, and it is these that we discuss below.

Recalling the opening words of this paper, we critically examine how these two components of the global development system – health and gender – have integrated ways of thinking that simultaneously advance and complicate local responses to the rising disease burden of NCDs in Mozambique. Global health draws on historical taxonomies of

biomedicine that tend to exclude other explanatory models of disease and broader lay understandings of disease causation. Gender mainstreaming draws on waves of Western feminist priorities that assume a dimension of universalism to gender construction; a position strongly debated among African feminist scholars who critique the bodily centrism and assumptions of power and subordination (Chilisa and Ntseane 2010; Oyèwùmí 1997, 1998), issues also noted as problematic in the colonial histories of global health (Packard 2016).

This paper sets out to examine these epistemology dissonances as they arose during a study of two NCDs of growing concern in Mozambique: hypertension and stroke.

Gender and health in the global development system

We contextualise these Mozambican examples within the relationships, knowledge, and power structures of the global development systems. In a wider literature captured in a previous special issue of this journal, Alex Martins (2020) notes that if we are to reimagine the global development system, we should critically examine the roots of global inequity and deep-rooted imbalances of power. Historically entrenched structural inequity between the global North and global South are also epistemological, favouring post-Enlightenment philosophies of knowledge, science, and technologies that accompanied European colonial expansion (Harding 1998). Conceptualisations of gender and taxonomies of illness and disease, signs, and symptoms have epistemological histories entangled with an enlightenment ethos that frame the inequities of power noted by Martins, resulting ‘in development as an act of the North upon the South’ (Martins 2020, 137). Earlier literature in the field of development and international affairs draws on this binary splitting of the world and, with this, maintains many historical colonial relations of power, practice, and knowledge that are often remade and re-deployed as part of what has come to be described as a system of neoliberal ‘neo-colonial’ global development (Durokifa and Ijeoma 2018). To what extent then, is global health – defined broadly by Beaglehole and Bonita (2010, 1) as *collaborative trans-national research and action for promoting health for all* – part of this neoliberal, neo-colonial system of development? Drawing on African feminist scholars’ critical readings of Western gender constructs, we examine how these global entanglements of gender in global health act to veil local epistemologies and explanatory systems of understanding hypertension and related stroke.

Drawing these together, this paper situates two ethnographic examples within the epistemological imbalances of power and knowledge through the prism of gender and global health in the global development system. First, exploring rural Mozambican expressions of cardiovascular symptoms that fall outside the biomedical canon, and second, reviewing some of the emergent gender dimensions of hypertension and related stroke. These serve to illustrate the complexities and the relations of power and types of knowledge that are at play in the Mozambican health system. We further consider how African feminist knowledge can provide an entry point for critically examining how the logics and taxonomies of modern medicine and the *bio-logism* and bodily centring of some Western gender discourses eschew local explanatory models. By applying this thinking to health,

critical African gender studies (Oyěwùmí 2005) can cast decolonising eyes across the global health landscape.

This paper will first present brief overviews of the health and gender contexts of Mozambique and then draw on two NCDs, hypertension and related stroke, using African feminist thinking to explore the interconnections of shared epistemology roots of global health and gender discourses in the global development system.

Methodological note

The research that inspired this paper is drawn from a larger three-country study of the double-burden of communicable and non-communicable disease. Details of the methodology and early findings have been published previously (Beran *et al.* 2018, 2019; Pesantes *et al.* 2020).

In Mozambique, the settings were: (1) Moamba district, a mainly subsistence farming area within Maputo Province; and (2) Xipamanine, a neighbourhood belonging to Nlhamankulu which is a peri-urban district within Maputo City with a heavy degree of informal commerce. The authors of this paper were co-principal investigators in the COHESION study, and led on the anthropological and gender dimensions of the research. The study included a formative stage of health systems assessments, global and national policy analysis, a community perceptions study, and finally a co-creation process with stakeholders to ascertain local community health priorities and interventions. Quotes cited in this paper are from expert and community interviews and community stakeholder meetings held between 2017 and 2020, recorded and transcribed verbatim, and analysed using a grounded theory approach.

Mozambique health context: brief overview

The Republic of Mozambique is a sub-Saharan African country characterised by poverty and inequalities. It ranks at 180 out of 189 countries in the United Nations Development Programme (UNDP) Human Development Index (HDI), and 139 out of 159 in the UNDP Gender Inequality Index. Its population is growing rapidly, reaching just over 31 million in 2020 with a median age of 17.6 years, and a steady growth in life expectancy of 65 years for women and 59 for men,¹ up from 54 and 50 years, respectively, in 2011. Although a country rich in natural resources, including recently discovered natural offshore gas, it maintains a large subsistence agricultural sector in many rural areas where small market economies have seen significant growth; processes of urbanisation and development of peri-urban spaces are also a feature of change in recent decades.² It is also a country prone to natural disasters and impacts of climate change that include drought, flooding, and cyclones that disrupt health service utilisation and medical supply chains.

Mozambique's health infrastructure and financing are weak, with reliance on donor support accounting for three-quarters of health expenditure. More than half the population must walk an hour or more to reach a facility, and stockouts are commonplace

as supply chains falter. The country has one of the lowest ratios of doctors to population in the world, with variation across regions from 1:50,000 in remote northern regions (Ferrão and Fernandes 2014) to 1:4,000 in Maputo.³ The disease burden across the country is dominated by the big three communicable diseases of HIV/AIDS, tuberculosis, and malaria, and the international vertical donors have tended to focus on addressing these areas of concern alongside sexual and reproductive health.

However, in recent years, like many other sub-Saharan countries, Mozambique has seen a rise in NCDs and has begun to face a double burden of persistent and highly visible infectious diseases and a silent, poorly documented, rise in NCDs, especially cardiovascular-related conditions.

Researchers in Maputo with whom we have been collaborating as a part of this study have been tracking the rise of two prevalent NCDs: hypertension and related stroke, on which this paper will focus. Their findings suggest that one-third of the adult population is hypertensive, among whom only 7.7 per cent are on treatment, suggesting that the prevalence of hypertension in Mozambique is among the highest in any low- and middle-income country (Damasceno *et al.* 2009; Ibrahim and Damasceno 2012; Jessen *et al.* 2018). One consequence of untreated hypertension is cardiovascular events such as stroke and this has produced a disproportionate toll as a leading cause of premature mortality (Connor *et al.* 2007; Damasceno *et al.* 2010).

Findings from other studies confirm that the prevalence of hypertension in Mozambique is among the highest in developing countries, in both adults and adolescents (Jessen *et al.* 2018), although these epidemiological shifts are yet to be seen in current outcome data or health service utilisation. This reflects not only the absence of a process for notification but also the lack of specialised clinical staff and equipment necessary for diagnosis, a point well-noted during clinic visits during this research, when clinic staff pointed out the lack of sphygmomanometers and diabetes testing kits. Efforts are under way, including the early adoption of an NCD National Programme in 2012 (Silva-Matos and Beran 2012), but Mocumbi *et al.* (2019) report that no NCD clinics were functional at the time of writing. So serious has the stroke burden become across sub-Saharan Africa more generally, that in 2019 the first cross-national scientific forum was launched to prepare for anticipated acceleration of risk factors in the coming decade, against a landscape of ill-prepared health systems (Owolabi *et al.* 2019).

Mozambique gender context: brief overview

The many global indexes of gender inequality place Mozambique in varying places in the tables. For example, the UNDP Gender Development Index (GDI) ranks Mozambique at 180, close to the bottom of the table. The World Economic Forum 2020 Global Gender Gap, however, places Mozambique at 56, just three places below the United States and above Italy, Israel, and nearly another 100 countries. The World Bank 2020 Women, Business and the Law scores Mozambique at 76.9, a midpoint in the rankings. Finally, with 39.6 per cent of seats in the parliament held by women, Mozambique comes in at number 40 in the tables on political participation and 17th in the 2019 UN Women

ranking of female parliamentarians, gains that link to post-conflict reconstruction and active gender equality advocacy. Such rankings, and their wide disparities, may tell us more about metrics and values of the global North than gender relations in everyday Mozambique, reflecting again points noted earlier by Alex Martins (2020).

An overview of legislation and policy interventions suggests Mozambique has been at the forefront of national-level efforts to address gender discrimination, including the use of corrective measures such as quotas in political parties, as early as 1994 (Tripp 2003). The constitution includes anti-gender discrimination text and the Strategic Plan for the Health Sector 2014–2019 (PESS) explicitly addresses issues of equity. Recent national education policy has strongly emphasised gender equality in schools; in 2019, the government passed a bill banning child marriage which will likely begin to impact numbers of girls marrying before the age of 18, bringing to an end, it is hoped, the well-documented negative consequences for life prospects and health that early marriage entails (Male and Wodon 2016).

Specifically, within the health sector, some of the most insightful and recent work by Talata Sawadogo-Lewis *et al.* (2018) examine female decision-making and representation in the health sector of Mozambique. The study suggested two primary findings: that women in the study did not report feelings of discrimination in health workplaces, and that senior health-sector women are perceived as more in tune with *women-centric issues*, defined in the research as policies that address concerns disproportionately affecting the health and well-being of the female sex (Sawadogo-Lewis *et al.* 2018). A second paper from this study found that interviewees unanimously argued that women's health is sufficiently prioritised in national health policies and strategies in Mozambique, but that the problem was implementation of these policies and strategies (Qiu *et al.* 2019). What we can draw from these findings is that, descriptively at least, women in the professionalised decision-making areas of the health system – that is women with intersecting attributes of education, training, and socioeconomic status – are quite insistent that at a personal level they do not face gender-related barriers in the health workplace.

This contrasts somewhat with the human resources for health at the larger community level. The cadre of frontline Community Health Workers (CHW), known as Agentes Polivalentes Elementares (APEs), are mainly men (85 per cent), for reasons that are somewhat gendered. APEs need to have completed full primary school education and are required to undertake a four- to five-month training, often outside their community (Hobday *et al.* 2019). Primary schooling became free in 2003 and system reform has nearly doubled enrolment, including 94 per cent of girls enrolling in primary education.⁴ However, only 11 per cent of girls continue to secondary school and the female literacy rate is half that of males, with just 28 per cent of females compared to 60 per cent of males (Gradín and Tarp 2019). Together with the requirement to move away for training, the gendered educational gap in rural areas continues to be a barrier to female APE recruitment, although a revitalisation of the programme in 2010 has sought to address this issue. APEs have also taken on additional capacities and new skills in the provision of family planning, including injectable contraceptives⁵ and misoprostal, an oral tablet to prevent post-partum haemorrhage that APEs can provide to traditional birth attendants for use

during home births (Chilundo *et al.* 2015). While APEs are well equipped to deal with infectious diseases and can provide antimalarials and antibiotics, they lack both the training and basic equipment to deal with hypertension and related stroke (Boene *et al.* 2016), a gap that also has implications for the treatment and management of pre-eclampsia in pregnant women (Macuácuá *et al.* 2019).

The varied picture described above echoes those found in the global rankings; in many areas where national policy interventions have been successful there have been significant gains in the position of women, particularly in political representation and decision-making spheres of central government. The impact of more recent policy initiatives in education and family law will likely become more visible in the coming years.

Hypertension and stroke: challenging to biomedical and gendered concepts

Weak health system infrastructure and donor-oriented funding streams focused on infectious disease are challenges to the growing burden of hypertension and related stroke. Changes in lifestyle have begun to unleash a new set of risk factors associated with NCDs as consumption patterns have shifted to include sugar-sweetened drinks and a significant increase in smoking and alcohol usage. These are concerning since they are the leading risk factors for hypertension and stroke (Mocumbi *et al.* 2019; Padrão *et al.* 2011). Beneath these more visible macro-level dimensions of the health burden, there are ethnographically observable challenges to the conceptual understanding of causation and treatment of these diseases, some of which are also drawn along gender lines.

We take these observations as the departure point to discuss hypertension and related stroke as challenges to Western biomedical and gender concepts in the presentation and experience of these conditions at a local community level. In doing so, we begin to raise questions posed by Martins (2020) around imbalances of epistemological knowledge and power, while also drawing on African feminist scholarship to detangle these conceptually. With these perspectives, we begin to make visible entangled epistemological histories of global health and gender in the global development systems.

Our discussion below rests on the elaboration of two ethnographic observations: biomedical explanatory models of causation tend to eclipse both lay models of causation around hypertension and related stroke, and lay models of causation that appear to differ along lines of gender.

Experiencing and treating hypertension and related stroke: local knowledge

It became apparent during fieldwork that the experience of stroke in the community does not always ‘fit’ with existing diagnostic thinking that forms the biomedical canon; stroke can be expressed in complex ways that align with wider lay explanatory models of disease and illness. In a primary care centre outside Maputo, a community health worker, an APE participating in an information-sharing session on cardiovascular prevention, stood up to explain the predicament:

We don't know if it [stroke] is caused by blood pressure. The most common disease is where you see a person and the arm is not functioning; another with mouth deviation to one side. We don't like that. All these things don't leave us satisfied – it is what we see that happens. (Male APE)

In the absence of clear explanation, such patients frequently go to traditional healers for consultation. Such signs and symptoms are sometimes interpreted within local explanatory models that include supernatural causes (Kleinman 1978). Another participant in the session recalled how his mother suffered for six years, exclaiming, 'she couldn't walk, she could hardly crawl', unaware of hypertension as the underlying cause. He continues:

When it happens to us, black people, we think it is a spell. (Male APE)

Another participant confirms, explaining:

People prefer traditional healers. Long ago, if someone had a pain in the arm, being unable to use it, we think it is witchcraft. For this reason, people have these thoughts and don't believe that the hospital can treat these diseases. (Male APE)

In extended interviews with several key informants, including a traditional healer, further insights into the role of traditional healers in the treatment of possible stroke and hypertension were revealed, confirming the causation model described above but also importantly raising further issues around treatment pathways that reconfirm lay understanding of hypertension and related stroke.

First is the role of trust. Communities form relations of trust with local healers, building up long-term personal relationships through consultations on all manner of ailments. The traditional healer is typically someone known by name, a person who may have treated the patient previously. This contrasts markedly with consultation in the formal health system where patients fear being seen by different practitioners at each visit, and so never build up a trusting clinical relationship. Trust is derived from continuity of the relationship over time, trust in the practitioner known by name. Implicit here too are the fears and judgements that engagement with the formal health system might entail, particularly if consultation with traditional healers is discouraged, as is described for antenatal clinics in other studies (Mungambe *et al.* 2016). As was illustrated by several interviews, a cosmological disease explanation related to witchcraft coupled with the observable fact the physical symptoms of witchcraft do indeed share resemblance to stroke (paralysis, loss of speech), suggest a well-worn and trusted treatment route via traditional healers. Two parallel systems of diagnostic logics and treatments emerge: the biomedical and the traditional.

There are also differences in the mode and logics of practice in the two systems. In the traditional system, the practitioner 'has to guess' the ailment of the patient. A patient may arrive, sit down and say nothing while the traditional healer uses their powers to determine, or divine, the nature of the sickness and a diagnosis. As one practitioner interviewee reflected on her own conundrum in consulting both biomedical and traditional doctors, and the challenge of trusting a biomedical doctor who asks too many questions and cannot 'divine' the cause of the problem:

So why, how would you trust the person who doesn't seem to have any knowledge and cannot fight, figure out what's wrong with me? (Female, biomedical practitioner, who also consults traditional healers)

The biomedical diagnostic process of patient narratives as a first means of discerning the nature of the health issue sits in contrast to the traditional healer who does not ask a patient to speak but can 'see' the illness. Patients, this interviewee explained, do not like to respond to questions and inquiries about the problem they are presenting such as 'how do you feel?', 'what is the pain like?' – the sorts of questions that form the bedrock of the diagnostic cannon of biomedical knowledge (Somerville *et al.* 2008). Local responses to a practitioner asking such questions as a means of diagnosis might be, 'this guy doesn't know anything!', explained an interviewee. The process, the interviewee exclaims, is not meaningful to the patient.

At this point we can draw on the scholarship of Oyèrónkẹ Oyěwùmí, whose work on Western gender concepts and the biologies of the body begins to shed light on the entanglements of gender and biomedical epistemologies. Lay Mozambican explanations of stroke can fall outside what Oyěwùmí (1997) calls the Western 'bio-logic' of gender which places the body and biological determinism as central. In contrast to the traditional healer, the Cartesian centrality of the body in Western bio-logic cannot accommodate non-bodily or supernatural causation of disease; the cultural logic of social categories like gender, and here stroke, are founded, Oyěwùmí argues, on biological determinism whereby biology, not cosmology, provides the rationale for societal organisation. As another interviewee explains:

It is this colonial mind; [biomedical] doctor knows everything because he studied it for 10 years or 20 years whatever ... (Female practitioner)

The Cartesian epistemology of the biomedical formal health system fails to fit with experience and expectation of the patient. The same approaches of feminist scholars cited above who use critique of Western conceptualisations of gender to upturn many assumptions of second-wave feminisms now become a way into destabilising the assumptions of Western biomedicine, its post-enlightenment roots and spread through colonialisms of past and present.

Explanatory models of stroke that include supernatural causation and witchcraft aetiologies find little space in international donor-funded programming despite the scale of the informal health system where these epistemologies predominate.

While there are no official figures of the range and scale of traditional healers, the National Directorate of Traditional and Alternative Medicine estimates there are over 300,000 across Mozambique; and their significance has recently gained traction at the highest national levels. On 1 September 2020, celebrations led by the deputy minister of health marked the Day of African Traditional Medicine in Maputo, noting that over 80 per cent of Mozambicans use traditional 'age-old medicine' for primary health care. This acknowledgement is important and one that needs to inform the ways in which global health actors engage with the plurality of the Mozambican health system.

The continued relevance of this traditional sector has been historically eschewed in the unfolding penetration of international health actors funding and programming in global health in sub-Saharan Africa, despite there being a wealth of literature pointing to its relevance and potential to advance health outcomes (Bagnol 2017; Mshana *et al.* 2008). Acknowledging and crediting local explanatory models of disease and the wide-ranging aetiological explanations of illness given by traditional healers in many areas of affliction and disease is essential to deepening understanding and thinking of disease causation through idioms outside the medicine of the global North. As Mshana *et al.* (2008) note in their study of stroke and witchcraft beliefs in Tanzania, it is critical to engage with explanatory models of stroke derived from supernatural causes if stroke awareness is to be increased. Furthermore, and as one of our key informants also concurred, the role of multiple healing systems that cross-reference and work in cohesion is central to designing effective interventions offering complementary and reinforcing messages and support to patients.

Gender lines of hypertension and related stroke

Although there are constant concerns around the paucity of data, especially in rural areas, a few insights are emerging in relation to gendered patterns of hypertension and related stroke. Mocumbi *et al.* (2019) provide the most recent insights in the first health service facility-based data collection in Mozambique. They identify a strong predominance of hypertension in women (68 per cent females versus 31 per cent males), a finding that runs counter to data gathered across the region during the 1990s, where the predominance of hypertension was found to be among men or equal between the sexes (Addo *et al.* 2007), and cardiovascular conditions were assumed to have a ‘male face’.

Hypertension can be a significant health concern during pregnancy, and data from a prospective population study confirm that gestational hypertension in Mozambique is more common than previously estimated (Magee *et al.* 2019).

Studies of hypertension among pregnant women, their partners, matrons, and traditional birth attendants in Mozambique, provide further examples of non bio-logic lay explanatory models. Two commonly expressed descriptors of hypertension in woman are ‘disease of, or, from the moon’ and ‘snake illness’. Social stressors such as marital discord, family or in-law dispute, and anxieties in communities have been also cited as possible causes of hypertension in pregnant women. These causal explanatory models differ from those identified in our study among men, whose association of hypertension-related stroke were more rooted in cosmological or witchcraft narratives of causation. The divergence in the understandings around causation and presentation between women and men may not be captured in the biomedical taxonomies, a point stated also by Boene in her studies of pre-eclampsia in southern Mozambique (Boene *et al.* 2016).

Gender differences in the presentation of stroke symptoms are well-noted in several population studies (Jerath *et al.* 2011), and these may become relevant in Mozambique when we examine local explanatory models of stroke causation that implicate gender dynamics, typically resulting in poorer outcomes for women (Doumas *et al.* 2013).

The early gender observations from Mozambique are important, and studies from elsewhere in the world would suggest these gender dynamics must be monitored and acted upon (Beal 2010). Our argument here also nudges us to delve deeper and beyond simple differences in prevalence and understanding of these diseases among women and men. To better understand and think about the gendered dimensions we also need to draw on the work and concerns raised by African feminisms as a lens through which to decolonise the intersections of epistemologies of gender and global health.

Thinking through health with an African feminist lens

Feminists such as Signe Arnfred (1988, 2011, 2015) Oyèrónkẹ Oyěwùmí (1997, 1998, 2002a), Akosua Adomako Ampofo (1997, 2004), and Ifi Amadiume (2000, 2015) have produced historical and contemporary scholarship that seeks to describe the ways Western gender categories become transposed and also imposed through sustained contact with the West (Oyěwùmí 1997). Gender roles and relations in these areas are well-described by Signe Arnfred, and her critique of the use of second-wave Western feminist assumptions in understanding sex and sexuality of Mozambican women, particularly among matrilineal communities and institutions, is an entry point to thinking through a process of decolonisation of gender in development and health. Common to these feminist theorists is the argument that second-wave feminist notions of gender hierarchies and female subordination ‘did not fit African settings’ (Arnfred 2011, 11) and the assertion that ‘the architecture and furnishings of gender research have been by and large distilled from Europe and American experience’ (Oyěwùmí 2002, 2).

Western gender categories, Oyěwùmí argues, in which the male is assumed to be superior and so the defining category, is alien to many African cultures. A focus by Western scholars on the status of women – a term that has infused the global gender agenda and which assumes woman as a social category – leads to misconceptions when applied to the Nigerian Yoruba society of Oyěwùmí’s research. Furthermore, and of relevance to discussions of disease and illness as bodily, these scholars are critical of the biologisation of Western feminisms that assumed biological and social conceptions could be separated and applied universally. Here, sex is ‘natural’ and gender the social construction of the natural situating the body and ‘bio-logic’ at the base of both categories (*ibid.*) in ways that simply do not sit with Yoruba society. More recently, Oyěwùmí has strongly argued that gender was not an organising principle in Yoruba society prior to colonisation by the West, and that the social categories of ‘men’ and ‘women’ were non-existent (Oyewùmí 2016).

This is an area that needs further exploration in the context of gender and health in Mozambique, raising important questions around the place of gender mainstreaming in the work of global health through its funding and programming dominance in the country. ‘It’s a gender thing. It’s Global Fund’ raises questions around what some have described as an ‘era of imperialism’ (Kim *et al.* 2017), and others as the neo-colonialism of global health (Biehl 2016). The context of the quote above was the provision of injectable contraceptives to women attending the clinic; a provision that is supported by

international health donors in HIV/AIDS programming. It is a gender ‘thing’, my colleague explained, because male partners are not necessarily supportive of women using contraceptives and injectables which can be used without male partner knowledge. This ‘barrier’ is identified in other studies to scale-up of contraceptive use (Akinyemi *et al.* 2020) and the use of invisible (to male partners) injectables is viewed as a simple solution but one that removes men from the equation. Discussions during our fieldwork in these clinics found that men felt increasingly marginalised and viewed as obstacles to women’s access to health services because of their assumed decision-making role in the household, a point that was contested during our fieldwork.

Women-centric health has been an important dimension of health programme interventions and necessary to address the particular sexual and reproductive health burden of women. The disruption of partner gender relations described in our study, and others, through non-disclosure raises wider gender questions around the role of men in the health system. As noted in an interview with an expert and practitioner:

For me, the problem comes from the process of genderising. That was top-down. It is not bad at the beginning because it has to start somewhere, but we should have designed a system where everyone is able to incorporate principles and not only working with women’s issues ... we need to open more to men. We can’t look at this issue as a woman’s issue anymore. We need men talking to men. (Female, expert practitioner and policymaker)

During further discussion, this expert explains that ‘top-down’ means not just nationally, but transnationally as part of the wider global moves to advance gender equality. This is not to say that priorities in the health of women and gender in global health are not shared, but that the direction of action is north to south, and this, many argue, reflects a wider geopolitical issue of power in development, the global North, the top, arriving through global health programming upon the global South. This in some ways speaks to three sets of concerns: the geopolitical practice of neo-colonialism (Durokifa and Ijeoma 2018); Martins’ (2020) concern around equity and entrenched Northern-imposed power imbalances in the development system; and Oyèwùmí’s analysis of the African body as subject to Western theories. The entangling of gender and gender discourses directly with a global health actor of the global North arguably continues the sorts of historical imbalances that Martins discusses as part of the international development system. How do we reconcile the ways that international donors and health programmes conceptualise gender and operationalise gender-related activities with the African feminist scholarship that questions these underlying epistemologies?

Conclusion

The rise of both modern biomedical knowledge and global feminist gender consciousness form entangled histories that embody hierarchical relations of geopolitical power, increasingly problematic in the 21st century. They also share epistemological roots firmly entrenched in post-enlightenment Western philosophical traditions that privilege the physical or natural body as the base entity, the bedrock of social order or disorder.

Drawing on Raewyn Connell (1994), Oyěwùmí (1997) notes that the body in its stark physicalness underlies gender categories in the Western worldview whereby interpretations of maleness and femaleness have physicality.

The historical underpinning of modern biomedicine and international health have long been recognised, but only recently the subject of calls to action to assertively decolonise the cannon of knowledge and practice that eschew lay explanatory models of illness and disease that deviate from the taxonomies of logic of the medical textbook. The kinds of presentations of stroke and the possibility of cosmological or supernatural causation simply do not find traction or credibility, and face a problem of belief. Gender, and gender equality-related activities of global health, have fallen also into the same problematic space of taking as starting point conceptualisations of gender that are born of a theoretical tradition that is firmly Western, foregrounding just as biomedicine also does, the physical biologically determined body.

Global health and gender are two giants of the global development industry, areas where donor dollars freely flow with ambitious targets to eliminate diseases and increase life expectancy, empower women, and advance gender equality. While laudable in its efforts, determined in its targets and deliverables, both areas of global intervention are in need of critical epistemological re-thinking that de-stabilises the entrenched relations of power and assumptions derived from colonialisms of the global North.

Notes

1. Data accessed online in September 2020 from Worldometers (www.worldometers.info/demographics/mozambique-demographics/#life-exp, last checked 23 December 2020).
2. The World Bank in Mozambique (www.worldbank.org/en/country/mozambique, last checked August 2020).
3. See www.who.int/hac/crises/moz/background/Mozambique_Sept05.pdf (last checked September 2020).
4. See <https://en.unesco.org/news/learning-literacy-family-mozambique> (last checked August 2020).
5. MISAU (2015) *Manual de Formacao dos Agentes Polivalentes Elementares (APEs): Modulo II Promocao de Saude e Prevencao de Doencas* (2a Edicao Revisao). Maputo: MISAU .

Notes on contributors

Claire Somerville is a lecturer at the Gender Centre and Fellow of the Global Health Centre, Graduate Institute of International and Development Studies, Geneva, Switzerland. Postal address: The Graduate Institute of International and Development Studies, Chemin Eugène-Rigot 2, 1202 Geneva, Switzerland. Email: Claire.somerville@graduateinstitute.ch

Khatia Munguambe is a lecturer at the Faculty of Medicine, Eduardo Mondlane University Maputo and Associate Researcher, Centro de Investigação em Saúde de Manhiça, Mozambique. Email: khatia.munguambe@manhica.net

References

- Addo, Juliet, Liam Smeeth and David A. Leon (2007)** 'Hypertension in Sub-Saharan Africa: a systematic review', *Hypertension* 50(6): 1012–18
- Akinyemi, Oluwaseun Oladapo, Bronwyn Harris and Mary Kawonga (2020)** 'Our culture prohibits some things': qualitative inquiry into how sociocultural context influences the scale-up of community-based injectable contraceptives in Nigeria', *BMJ Open* 10(7)
- Amadiume, Ifi (2000)** *Daughters of the Goddess, Daughters of Imperialism African Women Struggle for Culture, Power and Democracy*, London: Zed Books Ltd
- Amadiume, Ifi (2015)** *Male Daughters, Female Husbands: Gender and Sex in an African Society*, London: Zed Books Ltd
- Ampofo, Akosua Adomako (1997)** 'Costs and rewards—exchange in relationships', *Transforming Female Identities: Women's Organizational Forms in West Africa* 177
- Ampofo, Akosua Adomako, Josephine Beoku-Betts, Wairimu Ngaruiya Njambi and Mary Osirim (2004)** 'Women's and gender studies in English-speaking Sub-Saharan Africa: a review of research in the social sciences', *Gender & Society* 18(6): 685–714
- Arnfred, Signe (1988)** 'Women in Mozambique: gender struggle and gender politics', *Review of African Political Economy* 15(41): 5–16
- Arnfred, Signe (2011)** *Sexuality & Gender Politics in Mozambique: Rethinking Gender in Africa*, Woodbridge, Suffolk, UK: Boydell & Brewer Ltd
- Arnfred, Signe (2015)** 'Notas Sobre Gênero e Modernização Em Moçambique', *Cadernos Pagu* 45 (December): 181–224
- Bagele, Chilisa and Gabo, Ntseane (2010)** 'Resisting Dominant Discourses: Implications of Indigenous, African Feminist Theory and Methods for Gender and Education Research', *Gender and Education* 22(6): 617–32
- Bagnol, Brigitte (2017)** 'The aetiology of diseases in Central Mozambique: with a special focus on HIV/AIDS', *African Studies* 76(2): 205–20, <https://doi.org/10.1080/00020184.2017.1322867>
- Beaglehole, Robert and Ruth, Bonita (2010)** 'What Is Global Health?', *Global Health Action* 3(April 6): 10.3402/gha.v3i0.5142, <https://doi.org/10.3402/gha.v3i0.5142>
- Beal, Claudia (2010)** 'Gender and stroke symptoms: a review of the current literature', *Journal of Neuroscience Nursing* 42(2): 80–87
- Beran, David, François Chappuis, Albertino Damasceno, Nilambar Jha, Maria Amalia Pesantes, Suman Bahadur Singh, Claire Somerville, L Suzanne Suggs, and J Jaime Miranda (2019)** 'High-quality health systems: time for a revolution in research and research funding', *The Lancet Global Health* 7(3): 1–8
- Beran, David, Maria Lazo-Porras, Maria Kathia Cardenas, François Chappuis, Albertino Damasceno, Nilambar Jha, Tavares Madede, Sarah Lachat, Silvana Perez Leon and Nathaly Aya Pastrana (2018)** 'Moving from formative research to co-creation of interventions: insights from a community health system project in Mozambique, Nepal and Peru', *BMJ Global Health* 3(6): e0207225
- Biehl, João (2016)** 'Theorizing global health', *Medicine Anthropology Theory* 3(2): 127–42
- Boene, Helena, Marianne Vidler, Orvalho Augusto, Mohsin Sidat, Eusébio Macete, Clara Menéndez and Diane Sawchuck (2016)** 'Community health worker knowledge and management of pre-eclampsia in Southern Mozambique', *Reproductive Health* 13(2): 105
- Büyüü, Ali Murad, Cordelia Kenney, Andrea Koris, Laura Mkumba and Yadurshini Raveendran (2020)** 'Decolonising global health: if not now, when?', *BMJ Global Health* 5(8)
- Chilundo, Baltazar GM, Julie L Cliff, Alda RE Mariano, Daniela C Rodríguez and Asha George (2015)** 'Relaunch of the official community health worker programme in Mozambique: is there a sustainable basis for ICCM policy?', *Health Policy and Planning* 30(suppl_2): ii54–64
- Connell, Robert W. (1994)** 'Bodies and genders', *Agenda* 10(23): 7–18

- Connor, Myles D, Richard Walker, Girish Modi, and Charles P. Warlow (2007) 'Burden of stroke in black populations in Sub-Saharan Africa', *The Lancet Neurology* 6(3): 269–78
- Damasceno, Albertino, Azevedo Ana, Silva-Matos Carla, Prista António, Diogo Domingos and Lunet Nuno (2009) 'Hypertension prevalence, awareness, treatment, and control in Mozambique', *Hypertension* 54(1): 77–83
- Damasceno, Albertino, Joana Gomes, Ana Azevedo, Carla Carrilho, Vitória Lobo, Hélder Lopes, Tavares Madede, Pius Pravinrai, Carla Silva-Matos and Sulemane Jalla (2010) 'An epidemiological study of stroke hospitalizations in Maputo, Mozambique: a high burden of disease in a resource-poor country', *Stroke* 41(11): 2463–69
- Doumas, M., V. Papademetriou, C. Faselis and P. Kokkinos (2013) 'Gender differences in hypertension: myths and reality', *Current Hypertension Reports* 15: 321–330
- Durokifa, Anuoluwapo Abosede and Edwin Chikata Ijeoma (2018) 'Neo-colonialism and millennium development goals (MDGs) in Africa: a blend of an old wine in a new bottle', *African Journal of Science, Technology, Innovation and Development* 10(3): 355–66
- Ferrão, LJ and Tito H. Fernandes (2014) 'Community oriented interprofessional health education in Mozambique: one student/one family program', *Education for Health* 27(1): 103
- Gradín, Carlos and Finn Tarp (2019) 'Gender inequality in employment in Mozambique', *South African Journal of Economics* 87(2): 180–99
- Harding, Sandra (1998) 'Gender, development, and post-enlightenment philosophies of science', *Hypatia* 13(3): 146–67
- Hobday, Karen, Jennifer Hulme, Ndola Prata, Páscoa Zualo Wate, Suzanne Belton and Caroline Homer (2019) 'Scaling up misoprostol to prevent postpartum hemorrhage at home births in Mozambique: a case study applying the ExpandNet/WHO framework', *Global Health: Science and Practice* 7(1): 66–86
- Horton, Richard (2013) 'Offline: is global health neocolonialist?' *The Lancet* 382(9906): 1690
- Horton, Richard (2019) 'Offline: transcending the guilt of global health', *The Lancet* 394(10203): 996
- Ibrahim, M. Mohsen and Albertino Damasceno (2012) 'Hypertension in developing countries', *The Lancet* 380(9841): 611–19
- Jerath, Nivedita U., Chandan Reddy, W. David Freeman, Aarti U. Jerath and Robert D. Brown (2011) 'Gender differences in presenting signs and symptoms of acute ischemic stroke: a population-based study', *Gender Medicine* 8(5): 312–19
- Jessen, Neusa, Albertino Damasceno, Carla Silva-Matos, Edite Tuzine, Tavares Madede, Raquel Mahoque, Patrícia Padrão, Francisco Mbofana, Jorge Polónia and Nuno Lunet (2018) 'Hypertension in Mozambique: trends between 2005 and 2015', *Journal of Hypertension* 36(4): 779–84
- Kim, Jin Un, Obinna Oleribe, Ramou Njie and Simon D. Taylor-Robinson (2017) 'A time for new north–south relationships in global health', *International Journal of General Medicine* 10: 401–8.
- Kleinman, Arthur (1978) 'Concepts and a model for the comparison of medical systems as cultural systems', *Social Science & Medicine. Part B: Medical Anthropology* 12: 85–93
- Macuácu, Salésio, Raquel Catalão, Sumedha Sharma, Anifa Valá, Marianne Vidler, Eusébio Macete, Mohsin Sidat, *et al.* (2019) 'Policy review on the management of pre-eclampsia and eclampsia by community health workers in Mozambique', *Human Resources for Health* 17(1): 15
- Magee, Laura A., Sumedha Sharma, Hannah L Nathan, Olalekan O Adetoro, Mrutynjaya B Bellad, Shivaprasad Goudar, Salecio E Macuacua, Ashalata Mallapur, Rahat Qureshi and Esperanca Sevene (2019) 'The incidence of pregnancy hypertension in India, Pakistan, Mozambique, and Nigeria: a prospective population-level analysis', *PLoS Medicine* 16(4): 1–16
- Male, Chata, and Quentin T. Wodon (2016) 'Basic profile of child marriage in Mozambique', The World Bank
- Martins, Alex (2020) 'Reimagining equity: redressing power imbalances between the global north and the global south', *Gender & Development* 28(1): 135–53

- Mocumbi, Ana O, Bonifácio Cebola, Artur Muloliwa, Frederico Sebastião, Samuel J. Sitefane, Naisa Manafe, Igor Dobe, Norberto Lumbandali, Ashley Keates and Nerolie Stickland (2019)** 'Differential patterns of disease and injury in Mozambique: new perspectives from a pragmatic, multicenter, surveillance study of 7809 emergency presentations', *Plos One* 14(7): 1–18
- Mshana, G., K. Hampshire, C. Panter-Brick, and R. Walker (2008)** 'Urban-rural contrasts in explanatory models and treatment-seeking behaviours for stroke in Tanzania', *Journal of Biosocial Science* 40(1): 35–52
- Mungumbe, Khátia, Helena Boene, Marianne Vidler, Cassimo Bique, Diane Sawchuck, Tabassum Firoz, Prestige Tatenda Makanga, et al. (2016)** 'Barriers and facilitators to health care seeking behaviours in pregnancy in rural communities of Southern Mozambique', *Reproductive Health* 13(1): 31
- Owolabi, Mayowa, Fred Stephen Sarfo, Rufus Akinyemi, Mehari Gebreyohannis and Bruce Ovbiagele (2019)** 'The Sub-Saharan Africa Conference on Stroke (SSACS): an idea whose time has come', *Journal of the Neurological Sciences* 400 (May): 194–98
- Oyèwùmí, Oyèrónkẹ (1997)** *The Invention of Women: Making an African Sense of Western Gender Discourses*, Minneapolis, MN: University of Minnesota Press
- Oyèwùmí, Oyèrónkẹ (1998)** 'De-confounding gender: feminist theorizing and western culture, a comment on Hawkesworth's "confounding gender"', *Signs: Journal of Women in Culture and Society* 23 (4): 1049–62
- Oyèwùmí, Oyèrónkẹ (2002a)** 'Conceptualizing gender: the Eurocentric Foundations of feminist concepts and the challenge of African epistemologies' <https://www.codesria.org/IMG/pdf/OYEWUMI.pdf> (last checked 10 August 2020)
- Oyèwùmí, Oyèrónkẹ (2005)** *African Gender Studies: A Reader*, First edition, Houndmills, Basingstoke, England and New York: Palgrave Macmillan
- Oyèwùmí, Oyèrónkẹ (2016)** '(Re) Constituting the cosmology and sociocultural institutions of Oyo-Yoruba', in Oyèrónkẹ Oyewùmí (ed.) *African Gender Studies: A Reader*, Houndmills, Basingstoke, England and New York: Springer Press, 99–119
- Packard, Randall (2016)** *A History of Global Health: Interventions into the Lives of Other Peoples*, Baltimore: Johns Hopkins
- Padrão, Patrícia, Carla Silva-Matos, Albertino Damasceno and Nuno Lunet (2011)** 'Association between tobacco consumption and alcohol, vegetable and fruit intake across urban and rural areas in Mozambique', *Journal of Epidemiology & Community Health* 65(5): 445–53
- Percival, Valarie, Esther Dusabe-Richards, HHaja Wurie, et al. (2018)** 'Are health systems interventions gender blind? Examining health system reconstruction in conflict affected states', *Globalization and Health* 14: 90
- Pesantes, Maria Amalia, Claire Somerville, Suman Bahadur Singh, Silvana Perez-Leon, Tavares Madede, Suzanne Suggs and David Beran (2020)** 'Disruption, changes, and adaptation: experiences with chronic conditions in Mozambique, Nepal and Peru', *Global Public Health* 15(3): 372–83
- Pfeiffer, James and Rachel Chapman (2019)** 'NGOs, austerity, and universal health coverage in Mozambique', *Globalization and Health* 15: 1–6
- Qiu, Mary, Talata Sawadogo-Lewis, Katia Ngale, Réka Maulide Cane, Amilcar Magaço and Timothy Robertson (2019)** 'Obstacles to advancing women's health in Mozambique: a qualitative investigation into the perspectives of policy makers', *Global Health Research and Policy* 4(1): 28
- Riley, Leanne, Hebe Gouda and Melanie Cowan (2017)** 'The non-communicable disease progress monitor 2017'
- Sawadogo-Lewis, Talata, Réka Maulide Cane, Rosemary Morgan, Mary Qiu, Amilcar Magaço, Kátia Ngale and Timothy Robertson (2018)** 'Reaching substantive female representation among decision-makers: a qualitative research study of gender-related experiences from the health sector in Mozambique', *PloS One* 13(11): 1–15
- Silva-Matos, Carla and David Beran (2012)** 'Non-communicable diseases in Mozambique: risk factors, burden, response and outcomes to date', *Globalization and Health* 8(1): 37

- Somerville, Claire** (2020) 'Why global health can offer more on gender', *BMJ Global Health* 5(4): 1–3
- Somerville, Claire, Katie Featherstone, Harry Hemingway, Adam Timmis and Gene Solomon Feder** (2008) 'Performing stable angina pectoris: an ethnographic study', *Social Science & Medicine* 66(7): 1497–508
- Tripp, Aili Mari** (2003) 'The Changing Face of Africa's Legislatures: Women and Quotas' (Regional Workshop, "Implementation of Quotas: African Experiences," Pretoria, South Africa, Citeseer)