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Publication date
2022

Document Version
Final published version

Link to publication

Citation for published version (APA):
Rodrigues, C. (2022). *Trusting medicines: The social embeddedness of everyday medicine use in Maputo, Mozambique*.

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Carla
Rodrigues

Trusting Medicines

The social embeddedness of everyday medicine use in Maputo, Mozambique

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The social embeddedness of everyday medicine use
in Maputo, Mozambique

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Amsterdam, The Netherlands

June 2022

ISBN: 978-94-6419-523-1
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Printed by: Gildeprint – The Netherlands
Cover photography: Carla Rodrigues
Cover design: Martijn van Dam

This research was supported by the Portuguese national funding agency for science, research and technology (FCT) under Grant SFRH/BD/78172/2011.

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ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van
doctoraan de Universiteit van
Amsterdam op gezag van de
Rector Magnificus
prof. dr. ir. K.I.J. Maex

ten overstaan van een door het College voor Promoties ingestelde
commissie,in het openbaar te verdedigen in de Agnietenkapel
op donderdag 23 juni 2022, te 10.00 uur

door Carla Alexandra Ferreira Rodrigues

geboren te Oeiras

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Chapter 1

Introduction

Medicines are fascinating as well as intriguing social and therapeutic objects. They are powerful technologies and essential resources in modern healthcare systems. In most settings worldwide, there is a growing reliance on medicines as privileged solutions to manage ill-health – whether to cure, to alleviate, to control the progress of a disease or to prevent the development of a variety of conditions. Medicines are, moreover, increasingly sought after for well-being, and for performative and enhancement purposes, which go beyond strictly health concerns. An interest in understanding the ubiquity of these technological tools and their multifaceted roles and meanings in individuals' everyday lives was what drove this study.

This study was conducted in the city of Maputo, the capital of Mozambique, where pharmaceuticals are part of a vast repertoire of therapeutic resources that come from different geographical provenances. These include Mozambican and other African traditional medicines and herbal substances, Chinese medicines, homeopathic drugs, among others, which are available through numerous channels, both public and private, formal and informal, such as hospitals, clinics, pharmacies, shops, street markets, pyramid schemes and other (in)formal providers. Having this eclectic therapeutic landscape as an empirical background, the aim of this study is to contextually situate (the use of) pharmaceuticals within individuals' lifeworlds and in relation to other medicine options in Maputo: how are pharmaceuticals used, how are they perceived, and what are the reasoning, circumstances and sources of guidance behind local consumption practices? Such an understanding requires looking at medicines beyond their biochemical properties to analyse them as social phenomena involved in a web of social, cultural, economic and political relationships, tensions and agendas.

At a more theoretical level, this study was also driven by sociological inquiries around processes of pharmaceuticalisation, a notion that has been used to describe and problematise the increasing role of pharmaceuticals in modern societies. Focusing on micro processes involved in everyday medicine use in Maputo, and particularly attending to the interplay between individuals' agency and social structures, as well as between local dynamics and global processes, I aim to analyse how

pharmaceuticals are incorporated into the local and household pharmacopeia. I look at whether they constitute a (first) therapeutic option in self-care practices and/or have substituted the role of other therapeutic formulations, and whether they are stimulating new performative ideals and investments (beyond health purposes) in different spheres of individuals' personal and social lives. By examining this phenomenon in a social and economic context, where insufficiencies in healthcare and essential medicines provision in the public sector go hand in hand with a flourishing private pharmaceutical market, I aim to add to the growing body of literature on pharmaceuticalisation, particularly in the Global South.

The thesis is written based on a collection of research articles – chapters two to five – wherein I examine social practices, experiences, rationales and relationships around medicines use in Maputo city. In the following sections of this introduction, I will present the main background literature that guided the conceptualisation of this work, though further theoretical and analytical articulations are developed and discussed in more detail in the following chapters. This is followed by a brief historical account of the pharmaceutical sector in Mozambique, and ends with the analytical trajectory of the thesis and a description of the fieldwork methods, ethics and main research challenges.

The centrality of pharmaceuticals in therapeutic modernity: social lives beyond the figures

Pharmaceuticals are the hard core of biomedicine (Van der Geest and Whyte, 1988), the icon of therapeutic modernity (Lopes, 2010) and the keystone to the standing of the medicine and pharmacy professions (Davis, 1997). Yet, the social, economic and political lives of pharmaceuticals far exceed such medical and professional boundaries. As part of one of the most lucrative industries, global spending on pharmaceuticals continues to grow worldwide, from almost $500 billion in 2003 (Petryna and Kleinman, 2006) to nearly $887 billion in 2010 and $1.27 trillion in 2020[i]. Despite this global increase in expenditure and consumption – across countries from all income categories (WHO, 2011a,b) – there are still significant gaps between the so-called Global North and Global South. While more than 78% of the world's total expenditure on pharmaceuticals is accounted for by around just 16% of the world's

[i] Statista (2021), Global spending on medicines 2010-2025: https://www.statista.com/statistics/280572/medicine-spending-worldwide/ (consulted in 19.05.2021) – values in US dollars.

population living in high-income countries (WHO, 2011a), it is estimated that nearly two billion people globally have no access to essential medicines (WHO, 2017).

Notwithstanding such disparities, many social science studies conducted around the globe – especially in low-income settings – over the last three to four decades have shown how people have become increasingly reliant on medicines to manage common ailments. Despite – but also due to – insufficiencies in public health sectors, pharmaceuticals (including prescription-only drugs) have long circulated and are often available 'over and under the counter', both through formal retail community pharmacies (e.g. Ferguson, 1981; Logan, 1988; Kamat and Nichter, 1998) and through informal (and sometimes surprising) channels, such as street markets and local vendors (e.g. Van der Geest, 1987; Jaffre, 1999; Baxerres and Le Hesran, 2006) as well as traditional medicine practitioners (e.g. Wolffers, 1988).

Social scientists have long sought to understand what makes pharmaceuticals so attractive, both for users and prescribers, but also for other social actors involved in all their life cycles (Van der Geest et al., 1996). Medicines are concrete, travelling objects, socially and economically transactable, imbued with healing power and meanings that vary across contexts and throughout the different stages of their social lives (Whyte et al., 2002). Each stage of their cycle, from production to consumption, can be seen as a 'mini-system' (Cohen et al., 2001) with its own 'regime of values' (Van der Geest et al., 1996), involving specific institutions, social actors, relations, socioeconomic activities as well as different 'ethical concerns' (Petryna and Kleinman, 2006). Such a biographical approach[2] to pharmaceuticals is a useful analytical framework and a heuristic tool to analyse the complexities and tensions around the production, circulation and use of these popular technologies. It allows for an overview of a 'pharmaceutical regime'[3], and its intrinsic relationships, while also pointing us to specific processes that need deeper analytical attention within each stage. Thus, while in this thesis my analytical focus lies mostly on the consumption stage, such practices cannot be understood without also looking at their connections with other stages, whether through more *direct* face-to-face interactions (e.g. with prescribers and dispensers) or more *indirect* associations with the knowledge systems behind them (as explored in **chapter 2**).

[2] This approach to pharmaceuticals was first developed by Van der Geest et al. (1996) and was inspired by Appadurai's (1986) conceptual framework on 'the social life of things'.

[3] Pharmaceutical regime is understood as "the networks of institutions, organisations, actors and artefacts, as well as the cognitive structures associated with the creation, production and use of new therapeutics" (Williams et al., 2011: 711).

The pharmaceuticalisation of everyday life: theoretical background

The expanding and increasing centrality of pharmaceuticals worldwide, and their use as a privileged therapeutic solution to manage a growing number of situations and/or conditions, have been described in the social science literature – particularly in the last two decades – as a process of pharmaceuticalisation (Williams et al., 2008; Abraham, 2010). Pharmaceuticalisation can be defined as "the process by which social, behavioural or bodily conditions are treated or deemed to be in need of treatment, with medical drugs by doctors or patients" (Abraham, 2010: 604). As such, this process derives from and is intrinsically associated with larger, multifaceted and extensively studied processes of medicalisation (Zola, 1972; Illich, 1975; Conrad, 1992, 2007), which refers to the progressive expansion of modern medicine (and the dominance of the medical profession) into increasingly wider spheres of human life. According to Conrad's popular designation, medicalisation "is a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illness and disorders" (Conrad, 2007: 4). In its simplest form, the relationship seems straightforward; the increasing use of pharmaceuticals is intrinsically related to the increasing number of situations framed in medical terms and, by implication, subject to therapy. However, the intricacies between these two processes are much more complex, as I will show throughout this introduction and the thesis.

The notion of pharmaceuticalisation first appeared in Nichter's (1989) analysis of the increasing tendency towards the commodification of health through pharmaceuticals in India. Drawing on Marx's concept of exchange value[i], Nichter argued that health is increasingly becoming a commodity that can be privately appropriated and obtained through the consumption of other commodities, such as medicines. He referred to pharmaceuticalisation as "a term designating the appropriation of human problems to medicines" (Nichter, 1989: 239), and focused his analysis on the drivers behind the proliferation of commercially prepared medicines, and their relationship with the increasing reliance on such products as curative or preventive solutions and fixes for a variety of symptoms, health problems and other sociocultural concerns. In doing so, Nichter highlighted various entanglements between pharmaceutical industry strategies, changes in healthcare policies, prescription practices and local sociocultural values. As he argued, the expansion of

[i] More than the value of health *per se*, as entailed in Crawford's (1980) concept of *healthism*, Nichter discusses the idea of *functional health* – i.e., "the ability to perform work roles in the short term" (p. 238) – in relation to the social significance of obtaining "short term health as a form of wealth" (p. 236) through the use of commercially prepared medicine products.

the medicine market and the wide acceptance of medicines among the population was mainly fostered by: the establishment of a national health service, which increased contact between the population and healthcare providers; prescribing incentives for doctors, which promoted polypharmacy and got patients used to receiving medicines for every ailment; the biochemical effects of pharmaceuticals, especially antibiotics, as attested by consumers; and strategic medicine advertising, including exaggerated claims about their ability to cure certain symptoms and (what were known to be) cultural health concerns and distress.

The notion of pharmaceuticalisation re-emerges again in the social sciences literature only around two decades later, when it is further conceptualised by other scholars who problematise different micro processes as well as macro political-economic forces and relations around pharmaceuticals – resulting in what some have called the *pharmaceuticalisation of public health* (Biehl, 2006, 2007; Whitmarsh, 2008), the *pharmaceuticalisation of daily life* (Fox and Ward, 2008; Williams, Seale, Boden, Lowe and Steinberg, 2008) or the *pharmaceuticalisation of society* (Abraham, 2010; Williams, Martin and Gabe, 2011). These different approaches not only underline certain aspects that cannot be fully captured by the notion of medicalisation (as also highlighted by Nichter), but also make clear how pharmaceuticalisation (like medicalisation) encompasses both top-down as well as bottom-up processes.

Indeed, as argued by different scholars (e.g., Clarke et al., 2003; William, Seale; Boden et al., 2008; Abraham, 2010; Williams, Martin and Gabe, 2011; Coveney, Gabe and Williams, 2011), the concept of medicalisation has become insufficient to address certain aspects and new developments around pharmaceuticals' political economies, interventions and use, particularly in the last decades. Even after Conrad's (2005, 2007) revision of the important new drives or 'shifting engines' of medicalisation in the twenty-first century – which included *developments in biotechnology* (especially the pharmaceutical industry and genetics), *consumerism* and *managed care markets* – it still does not capture or explain the continued growth in the use of pharmaceuticals for some already existing medical conditions, nor the (also increasing) use of pharmaceuticals for non-medical purposes (Abraham, 2010; Williams et al., 2011). It is not only pharmaceutical companies that have been pushing the boundaries of treatable illnesses to expand their markets (Moynihan and Cassels, 2005); pharmaceuticals are also increasingly sought after by users to manage ever more aspects of their 'lifestyle-related activities' (Fox and Ward, 2008). Hence,

pharmaceuticalisation of everyday life regards the widespread use of medicines not only as a dominant option in therapeutic management, for both *expert* and *lay* interventions (cf. Lopes, 2007) – the dynamics and nuances of which in Maputo are explored in **chapters 2 to 4** – but also for various purposes "which extend far beyond the realms of medicine or the strictly medical" (Williams et al., 2008: 816) – further discussed and problematised in **chapter 5**.

A different strand of this phenomenon is related to what Biehl (2006; 2007) has designated as the pharmaceuticalisation of public health. Focusing on the Brazilian response to AIDS, which saw a dramatic increase in access to treatment and which reduced AIDS mortality by 70% in the country, Biehl discusses and problematises the implications of so-called 'magic bullet' approaches to health care. The Brazilian AIDS response resulted from a combination of social forces (from local activists and non-governmental organisations to international development agencies) and political will to make antiretroviral drugs (ARVs) universally available as a human right. Negotiations between the Brazilian government and pharmaceutical companies to reduce drug price, production of generics in both public and private-sector laboratories, among other measures, resulted in "a policy of biotechnology for the people" (Biehl, 2007: 1088). This in turn inspired international activism and encouraged other low- and middle-income countries (LMICs) to make these lifesaving drugs available to their populations. According to Biehl, this process shaped not only the concept of public health in Brazil and beyond (which became increasingly decentralised and pharmaceuticalised), but also global AIDS initiatives worldwide, with their increasingly pharmaceutically-driven solutions. As he argues, "a pharmaceutically centered model of public health is being consolidated worldwide, and medicines have become increasingly equated with healthcare for afflicted populations" (Biehl, 2007: 1107).

This pharmaceutically-centred approach, which has for decades dominated international health interventions, tends to narrow the focus down to the delivery of health technologies to tackle specific diseases, regardless of the local healthcare infrastructures and often without considering the social, political and economic dimensions around them (Biehl, 2007; Biehl and Petryna, 2013). Such an analysis is important to understand the centrality of and dependency upon the availability and affordability of pharmaceuticals as forms of care and as solutions for a variety of public health problems – many of which result from broader social and infrastructural

problems. As I will further discuss in **chapter 3**, this is particularly relevant as a background analysis for contextualising certain aspects of pharmaceutical use, such as antimicrobials, in settings like Mozambique, where local prescribing, dispensing and consumption patterns often go against national and international recommendations for 'rational use'. But whose rationale?

From essential medicines to the rational use of drugs: whose rationale?

Social scientists' interest in studying medicines as social and cultural phenomena, particularly in non-Western contexts, started around the 1970s and, more systematically, in the 1980s (e.g., see edited volume by Van der Geest and Whyte, 1988). The emergence of an anthropology of pharmaceutical studies coincided with international discussions and the development of essential drugs programmes in order to regulate and rationalise the supply and use of medicines. During the 28th World Health Assembly in 1975, governments were advised to formulate national drug policies, and the World Health Organisation (WHO) was called to assist member states in drafting essential medicines lists; these medicines should be based on each country's health needs, accessible at reasonable cost, and with verified quality, efficacy and safety[5]. The supply and provision of essential drugs by national governments became one of the key components of primary healthcare (Alma Ata, 1978). Besides selection and supply, the emphasis on 'rational use' appeared as another central theme during the 1985 Nairobi conference, organised by the WHO. According to the conference report, "[t]he rational use of drugs requires that patients receive medicines appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and the community" (WHO, 1987: 299). Accordingly, 'irrational use' is when one or more of the conditions defined above is not met (WHO, 2002[6]). While the way in which such 'clinical needs' are defined, assessed and followed may vary considerably in different settings worldwide, patients or consumers seem to appear here merely as 'receivers' – who, if well informed (as mentioned later in the report, p. 305), would be able to follow clinical instructions and advice. This overlooks not only individuals' active role in their own therapeutic processes but also, as Van der Geest et al. (1990)

[5] World Health Assembly, 28. (1975), *Twenty-eighth World Health Assembly*, Geneva, 13-30 May 1975: part II: verbatim records of plenary meetings: summary records and reports of committees. World Health Organization. https://apps.who.int/iris/handle/10665/86023

[6] See also: https://www.who.int/activities/promoting-rational-use-of-medicines (last consulted in June 2021)

have argued, the cultural and economic dimensions of medicine use, particularly in LMICs.

The 'rational' vs. 'irrational' formulation has long been problematised by social scientists working in this field (e.g., Van der Geest et al., 1990; Hardon, 1991; Nichter and Vuckovic, 1994; Etkin and Tan, 1994; Cohen et al., 2001; Whyte et al., 2002; Lopes, 2003, 2010; Britten, 2008). It reflects a more *technicist* and rather normative view of pharmaceutical use, based on pharmaceuticals' biochemical properties, and assuming scientific medical knowledge to be the single legitimate rationale for 'appropriate' or 'responsible' usage. In doing so, this formulation disregards other (also legitimate) rationalities that incorporate other *not so technical* dimensions, as well as the importance of social and historical context, healthcare infrastructures, economic and political forces, social (and non-social) experiences and interactions, and other situated circumstances that influence, motivate and/or structure different forms of pharmaceutical use. Analysing social rationalities around medicine use in different cultural settings also implies going beyond an 'objectivist' approach, where *lay* or *patient* perspectives on health, illness, therapeutic rituals or medicinal drugs tend to be portrayed as 'health beliefs' (reflecting doubt, uncertainty, error) when they differ from scientific or medical 'knowledge' (often associated with objectivity, certainty, correctness) – the latter of which observers tend to grant authority (Good, 1994). As has long been shown, both *lay* and *expert* knowledges are socially and culturally shaped (*idem*), and are more interdependent than is conventionally recognised (Wynne, 1996: 74). In contexts such as Mozambique, the co-existence of different historically and socially grounded epistemologies and medical practices further challenges such a hegemonic approach. Thus, a deeper and more nuanced understanding of pharmaceutical use requires looking beyond this one-dimensional and dichotomous rational framework.

Following this more critical approach to social rationalities in medicine use, the analytical focus in this thesis privileges individuals' experiences and the practical reasoning (Horlick-Jones, 2005) behind, and the social processes involved in, different modalities and contexts of use. This implies redirecting atomised approaches to health and consumption practices to the social contexts where they occur, and to mobilise an interpretative perspective that allows for deeper explorations of how individuals and social groups select, interpret and make use of available products, but also the various (and sometimes competing) forms of knowledge and information they engage with in

their everyday lives. Such an approach is particularly relevant when attending to the social and historical processes in which Maputo's eclectic therapeutic landscape is embedded, as I will briefly describe in the following section.

The pharmaceutical context in Mozambique: brief historical account

Mozambique was among the earliest countries to create a national formulary (NF), even before the first model list of essential drugs was proposed by the WHO in 1977. After its independence from Portugal in 1975, the healthcare system was nationalised, private medicine was abolished and two years later the national health service (NHS) was created with a strong emphasis on primary and preventive healthcare. One of the main needs was the creation of a pharmaceutical policy (Martins, 1983). Before independence, there was minimal control over the imported, prescribed and sold products; a capitalist logic dominated the private pharmaceuticals market and all drug costs were borne by patients (Barker, 1983). Besides the creation of the Central Medical Store (*Central de Medicamentos e Artigos Médicos*, CMAM) in 1975, a Technical Committee for Therapeutics and Pharmacy (*Comissão Técnica Terapêutica de Farmácia*, CTTF) was also established to centralise pharmaceutical policy-making. After a first reduction in the number of licensed drugs from around 13,000 to 2,600 in 1975, the NF reduced the non-essential or unnecessarily expensive pharmaceutical products even further to 640 in 1977, and 502 in 1980 (*idem*). The creation of the state-owned company MEDIMOC, responsible for the import and export of medicines, medical supplies, vaccines and hospital equipment, also permitted price negotiations, resulting in a substantial price reduction for some medicines (Melrose, 1982).

The departure of most private pharmacy owners and/or managers (as well as other Portuguese healthcare professionals) after independence left many pharmacies abandoned, particularly those located in urban areas. To fill this gap, another state company (FARMAC E.E.) was created to supervise and develop the retail network, with the aim of reaching areas that lacked access to pharmaceutical services. Additionally, a list of pharmaceuticals that could be sold without a prescription by general stores was also created to cater to areas where no retail pharmacies were available (Martins, 1983). The lack of medical doctors, on the other hand, resulted in the arrival of practitioners from around 40 different countries, which, among other challenges, raised concerns in terms of prescribing uniformity (*idem*). One of the

measures taken was the abolition of brand name prescriptions, which is still the rule today (Law No. 12/2017, art. 34), where the use of the International Common Denomination of Drugs is mandatory. As Russo and Banda have pointed out, "Mozambique's post-independence pharmaceutical policy was praised as one of Africa's most progressive" (2015: 262).

Despite such developments and rapid improvements in the health sector, this process was vastly affected by a deteriorating economy and increasing political and military instability resulting from a 16-year civil war that lasted until 1992, during which several hundred healthcare facilities around the country were closed or destroyed (Hanlon, 2010). After joining the International Monetary Fund and the World Bank in the mid-1980s, Mozambique introduced various social and economic reforms, following the structural adjustment programs (SAPs) promoted by the Bretton Woods Institutions. This resulted in a gradual transition from a centralised socialist economy towards a neoliberal market economy and privatisation policies (Pitcher, 2002). This also 'liberalised' private medicine practices in 1991, and later led to the formal recognition of traditional medicine – though people had secretly continued to consult traditional practitioners, even when this was forbidden (Honwana, 2002; Meneses, 2004) – and opened the doors to an increasing number of international non-governmental organisations (INGOs) to fill the gaps in public services created by the SAPs (Pfeiffer, 2003). While INGOs indeed helped fill some of those gaps, as Pfeiffer (2003: 726) has argued, "the flood of NGOs and their expatriate personnel has fragmented the health system and contributed to intensifying social inequality in local communities with important consequences for primary healthcare delivery". Aside from the direct cuts in public social policies (Cruz e Silva, 2002a), such fragmentation resulted in part from (uncoordinated and sometimes overlapping) project-based approaches directed towards objectives identified by foreign donors rather than local priorities, and from the foreign aid impact on local health service workers[7].

The negative impacts of the civil war and post-war neoliberal economy, as well as of the rural exodus and the return of displaced and migrant people from nearby countries – especially to urban areas such as Maputo city, where the population is estimated to have increased by 50% in 10 years – have worsened the social and

[7] Such an impact resulted especially from the disparate salaries, which attract key workers from the public health sector, and from disruptions on service planning and staff routine duties (Pfeiffer, 2003).

economic situation of the population (Cruz e Silva, 2002a). Particularly during the 1990s, the increase in urban poverty, high levels of unemployment and difficult access to basic social services, among other problems, created conditions that paved the way for new networks of solidarity and forms of association, both formal and informal, based on trust, empathy and cooperation among the population (*idem*)[8]. According to Cruz e Silva (2002a), the informal markets in Maputo emerged in the late 1980s and significantly evolved (also) as a response to the abovementioned negative impacts. This background is relevant to understand the significance of the informal sector as part of local social and economic survival strategies.

As a parallel economy and informal markets thrived in Maputo, so did the circulation of pharmaceuticals. The diversion of medicines from the public sector to informal markets or to private practice in clinics, pharmacies and health workers' homes was widely reported (e.g., Pfeiffer, 2003; Ferrinho et al., 2004; Mosse and Cortez, 2006). Anecdotal stories collected during my own fieldwork in Maputo, for example, also told of similar situations; when access to healthcare and pharmaceuticals was scarce, it was common to go to a nurse's home for healthcare advice and to purchase medicines[9]. As Van der Geest (1985) has argued, based on similar observations in Cameroon, the shortages reported in the formal sector and the informal circulation and provision of diverted medicines reflect the 'intertwining and mutual dependence' of both sectors.

While the post-war rehabilitation of health infrastructures in Mozambique continued to evolve, the private pharmaceutical sector began to flourish, particularly after the Medicines Law of 1998 (Lei do Medicamento Nr. 4/98). Since the liberalisation of the (healthcare) market, and the allowance by the Ministry of Health (MISAU) for private companies to import medicines, there has been a proliferation of private pharmacies, especially in urban settings, "filling the availability, quality and diversity gaps left by the public sector" (Russo and McPake, 2010: 71). While in 2012 there were a total of 293 retail pharmacies in the country (60% of which were concentrated in Maputo; MISAU, 2012), in 2018 the number of pharmacies had risen to 894 (USAID, 2019). Their concentration in Maputo city and Maputo province is still accentuated and, according to the *Strategic Plan for the Health Sector 2014–2019*

[8] In these times of great social and economic instability, it is also important to highlight the role of the family in such survival strategies (Costa, 2007), as well as the proliferation of healing churches in Mozambique (Pfeiffer, 2002) – such as Zione (Cavallo, 2013; Cruz e Silva, 2002b) – including in Maputo.

[9] It is important to make a distinction between 'home pharmacy', which refers to the medicines people have in their homes for their own use (as the pictures throughout this thesis illustrate), and medicines sold from individuals' houses (as reported above).

(MISAU, 2013), over half of the private for-profit health service establishments in Maputo city were delivering pharmaceutical services. In the capital city, the pharmaceutical market is fragmented into low-cost pharmacies in peripheral neighbourhoods and expensive 'luxury' pharmacies in the city centre (Russo and McPake, 2010). Without any public drug reimbursement or co-payment schemes, the costs in retail pharmacies are largely born out-of-pocket (*idem*). While the availability of pharmaceuticals through formal channels in Maputo has improved considerably in the last two decades, reports show that medicine shortages in the public sector are still an ongoing challenge (Matine, 2015) and that they are still available and indeed purchased in the local informal markets (Maputo City Council, 2017).

In Maputo today, one can find a variety of biomedical, traditional, spiritual and other healing practices and, as will be further explored in the next chapter, a wide range of different kinds of medicines. In this study, analytical interest lies in medicines that can be administered privately at home (even if recommended, sold or prepared by a provider) to manage common ailments or conditions, for prevention, wellbeing or enhancement purposes.

Analytical approach, dimensions and trajectory

Based on the theoretical inquiries and the social and historical context described in the previous sections, I now turn to the analytical trajectory and approach developed throughout this thesis. By privileging individuals' experiences of and understandings around medicine use, I draw on a phenomenological approach to examine how 'interpretative frameworks' (Schutz, 1970) are differently mobilised to make sense of the repertoire of therapeutic resources available to them and to analyse local social understandings around different elements of risk, uncertainty, efficacy and safety. By contrasting pharmaceutical substances with traditional medicines (mainly coming from Mozambique, neighbouring African countries and China) and other herbal substances, I explore local cosmologies around notions of science, modernity, tradition and religion, and how they are all differently entangled and part of individuals' lifeworlds. How individuals' different world views are structured, what their knowledge bases are, and how these relate to or inform consumption practices, is discussed in more detail in **chapter 2**. Here, the notion of trust is used as a key theoretical and analytical dimension that emerged during my fieldwork discussions with participants as an important social and relational interpretative process around medicine use.

The analysis unfolds from these more conceptual elaborations to specific practices involving self-medication and antibiotics (in **chapter 3**). Self-medication with antibiotics is a key theme around the 'rational use' of medicines in the community, due to increasing concerns over the global emergence and spread of antimicrobial resistance (WHO, 2015a,b). Here, I discuss the various meanings and understandings of 'responsible use', and pay particular attention to how individuals' knowledge around antibiotic use is constructed, and to how different structural and relational factors contribute to consumption practices that may not always follow biomedical recommendations of 'rational' or 'appropriate' use.

Interactions with healthcare providers, particularly with public healthcare providers and community pharmacy workers, appear in both these chapters as an important relational dimension which has implications for access to information and medicine use. To take this analysis one step further, and *zooming in* on one of the layers of trust identified in chapter 2, I use a communicative trust framework approach (Brown, 2008), which draws on Habermasian communicative action theory (1978), to explore the various communicative and relational attributes emphasised by users as meaningful and underpinning different qualities of care, competence, integrity and trustworthiness. How this communicative and relational dimension comes to affect individuals' trust in what is being prescribed or advised is analysed in detail in **chapter 4**.

As part of my interest in analysing different dimensions around the pharmaceuticalisation of everyday life in Maputo, I also sought to understand the extent to which pharmaceuticals, as well as other medicines, were being used for purposes beyond strictly health concerns. In **chapter 5**, I explore what my colleagues and I, in a different study, called 'performance consumptions' (Lopes et al., 2015), i.e., the use of medicines and other substances – in this case, pharmaceuticals, food supplements, traditional herbs, cosmetics and energy drinks – by individuals to manage different aspects of their everyday lives. These include managing tiredness, sexual performance and physical aesthetics, which are linked to individuals' aspirations and perceived social expectations, and which they seek to fulfil through the help of medicines and other commercial substances. How social (il)legitimacies around such consumption practices are constructed, and how intersections between 'modern' and 'traditional' are articulated, are further discussed.

In **chapter 6**, I draw together the main conclusions and further develop some of the key contributions of this study to the existing literature and ongoing debates in this field. I do so, particularly around three main themes: on social rationalities, ways of knowing and information needs around medicine use; on 'trusting medicines' and the significance of

trust in everyday therapeutic and medicine use processes; and on local trusting dynamics and the social embeddedness of commodification and pharmaceuticalisation processes, especially when considering concerns beyond health.

Fieldwork in Maputo: the methods, ethics and (main) research challenges

Collection of the empirical data used in this thesis involved a total of 10 months of ethnographic fieldwork in Maputo, divided into two parts between 2013 and 2016, and a mixed-methods approach for collecting both qualitative and quantitative data. These included: observations in community pharmacies, the conducting of seven focus group discussions (FGDs), the application of a household survey, repeated follow-up interviews with residents in different neighbourhoods in Maputo, as well as numerous interviews and informal conversations with local researchers, healthcare providers (associated with different healing practices and systems) and individuals in the community that I met as my local social network gradually expanded. The different methods were applied either simultaneously or in sequential order, as I will describe below, building on each other. More detailed information regarding the use and purpose of each method is provided (and sometimes repeated) in the following chapters. Here, I give an overview description of my fieldwork trajectory and procedures.

I started my fieldwork in Maputo in October 2013, five years after my previous departure[10]. I was warmly received by old and new friends, who were quick to orient me to my surroundings and show me new attractive places in this vibrant and increasingly global city. After a few weeks, I found my new dwelling close to one of the most well-known pharmacies in the city, which turned out to be a good reference and meeting point.

My research was hosted by the Department of Sociology, through the Health and Society Research Group, of the Faculty of Arts and Social Sciences, Eduardo Mondlane University. This became my main working space during the first couple of months, which allowed me to spend more time with my new colleagues and get involved in some of the department activities[11], while planning in detail the methodological

[10] In 2008, I was involved in a malaria control project, "*Tisuna Muzototo* – Integrated Project to Malaria Control in the region of Ckókwè, Mozambique", funded by the European Commission and led by the Institute of Hygiene and Tropical Medicine, Universidade Nova de Lisboa and the NGO Doctors of The World – Portugal. My own small-scale qualitative study within this larger project resulted in my master's thesis (Rodrigues, 2009).

[11] Among other activities, during my stay as a research fellow I presented in three research seminars (2013, 2014 and 2016) directed at students and staff from the department of sociology (though open to everyone) around the socio-anthropological aspects of

strategy and preparing the documentation needed to submit to the local bioethics committee.

The bureaucratic journey required to make this research project come to life was a long and particularly challenging one. Before going to Mozambique, the research protocol received approval by both the scientific and the ethical committees of the Amsterdam Institute for Social Science Research, University of Amsterdam. In Maputo, it received formal ethical approval from the Institutional Committee on Bioethics for Health of the Faculty of Medicine and Maputo Central Hospital, five months after my arrival. Additional administrative permissions were required for each methodological step. First of all, I was required to have a formal permission from the National Directory of Medical Assistance of MISAU to formally meet the heads of different MISAU departments and associated institutions, namely, the (then) Hospital Pharmacy Department, FARMAC E.E. and the Institute of Traditional Medicine. This allowed me to present my study aims, as well as to discuss institutional and contextual aspects around the pharmaceutical sector in the country, particularly in the capital city. Formal data collection started in March 2014, after I had received the necessary permissions. From March to June, the pace of my work picked up drastically.

The exploratory stage of my fieldwork included observations in five pharmacies[12] (private and parastatal) located in different neighbourhoods, and the conducting of FGDs (n=42) with university students[13], members of a theatre group and residents in two socioeconomically different areas (one in the city centre and the other on the outskirts of Maputo)[14]. The observations in pharmacies were a very useful starting point for me to grasp, among other aspects, the most sought-after kinds of medicines (with and without prescription), individuals' familiarity with some medicines (by generic or brand names), the interactions between pharmacy workers and their clients, the kind of information people looked for and were provided with, etc. The FGDs, as further explored in **chapter 2**, were conducted by me with the assistance of an undergraduate sociology student, who was responsible for recording, taking notes and transcribing the interviews. In the FGD conducted in the peripheral suburban

and approaches to studying medicines and/in society. In the last seminar (2016), I was able to present and discuss part of my research findings on therapeutic pluralism and modalities of trust, which resulted in the second chapter of this thesis.

[12] Authorisation to conduct these observations was provided either by the director of FARMAC E.E. or by the owner of the private pharmacies.

[13] After formal permission from the heads of the departments where the students were enrolled.

[14] Written informed consent was obtained from all FGD participants.

area, the assistant student's knowledge of Shangana[15] was crucial in order to translate parallel conversations during the group interview.

During the FGDs, preparations for the household survey application were undertaken. The survey was conducted in the five most populous districts of Maputo city (INE, 2020): KaMpfumo, Nhamankulu, KaMaxakeni, KaMayota and KaMubukwana. In each district, a total of three neighbourhoods were randomly selected and, within each neighbourhood, two blocks were selected as starting points for a *random route* sampling method. Formal permissions to collect data were necessary from each level of the administrative structure, which required meeting the heads of the district administrative posts (whose contacts were obtained through the city council) as well as the secretaries of the 16 neighbourhoods (which included one extra neighbourhood to test the questionnaire and for student training purposes) and, later on, the block chiefs.

I trained a total of eleven undergraduate sociology students regarding: the thematic content of the questionnaire, face-to-face interview techniques (using role play exercises), ethical aspects around the inquiry process, data coding, database construction in Excel, and data entry. Additionally, with the precious help of a colleague from the African Studies department, the students had an extra training session to translate the questionnaire into Shangane, for non-Portuguese-speaking respondents[16].

Eight students were selected to apply the questionnaires and two were responsible for the databases. A total of 265 questionnaires were applied in a record time of less than two months. This required an extremely strict organisation and timetable, articulating students' academic schedules with those of the neighbourhood secretaries and block chiefs (who would guide us in the field) and a local driver hired for this fieldwork stage (and with whom I worked again in 2016). During these two intensive months, aside from other meetings and individual interviews with healthcare providers (including biomedical doctors, Mozambican traditional practitioners, Chinese traditional clinicians, herbal and holistic providers), I accompanied the students on all their first visits to each neighbourhood as they made door-to-door contact (half in the morning and half in the afternoon), reviewed all

[15] Shangana (Shangaan, Changana, XiChangana) is a language of the Bantu group, also spoken in South Africa, Swaziland and Zimbabwe (Nhampoca, 2017). In Mozambique, it is the second most spoken bantu language, mainly in the southern provinces of the country (Timbane & Nhampoca, 2016). According to INE (2020), 61.4% of the population in Maputo city speak Shangane.

[16] The informed consent forms were also translated. In the end, however, only 12 questionnaires were fully applied in Shangane.

applied questionnaires to further guide students in subsequent applications, and double-checked (and sometimes corrected) the database entries daily.

After eight months in Maputo, the first part of the fieldwork was concluded. I came back to Amsterdam in late June 2014 with a range of data to analyse and to prepare for the next (qualitative and more in-depth) stage of data collection, which was planned for January 2015. Due to an unexpected health problem, however, I had to postpone (and shorten) my second fieldwork. In June 2016, I was finally back in Maputo for two additional intensive months of fieldwork. Using a similar strategy followed in a previous study conducted on medicine use in Portugal (Rodrigues, 2010), I selected a small sample of individuals who had participated in the household survey and in the FGD discussions. Only those who had agreed to be interviewed in the second part of the study were contacted. Individuals were selected based on different criteria, in an attempt to have some level of heterogeneity and balance in terms of neighbourhood residency (i.e., coming from different areas of Maputo city), level of education, age, gender as well as consumption practices (i.e., type of medicines – pharmaceutical, traditional, etc. – and purposes of use). As two years had passed since their participation in the first part of the study, recruiting participants turned out to be more difficult than anticipated. With the help of a research assistant to establish contacts, we were able to recruit 17 interviewees, each of whom I met a few times. While these contacts were being made, I additionally interviewed and talked with other key informants, including several pharmacists (working both in the city centre and in peripheral areas), an herbal holistic practitioner (whom I had already met in 2013; besides his practice in a private clinic, he prepared and distributed medicines for free in the community), and a personal trainer. These were all recruited through direct approaches, the snowball method and/or personal network contacts. After these two months in Maputo, I officially ended my fieldwork.

'Home pharmacy', Maputo (2016)
Photograph taken by Carla Rodrigues.

Chapter 2

Medicines and therapeutic pluralism in Maputo: exploring modalities of trust and the (un)certainties of everyday users[17]

Abstract

The increased accessibility of medicines across the globe has expanded choice in therapeutic consumption. These changes give rise to increasing complexity and new uncertainties regarding the repertoire of therapeutic resources available for everyday users. This raises questions of how individuals evaluate different therapeutic resources and how they choose among such diversity in their daily lives. Using ongoing research in Maputo, Mozambique, in this article I explore how differentmodalities of trust influence decision-making processes concerning medicine use for minor ailments, particularly the role of trust in the management of perceived uncertainty and risk in a context of therapeutic pluralism. The research included 8 months of ethnographic fieldwork in 2013 and 2014 plus seven focus group discussions with a total of 42 participants. I found that three main layers of trust framed individuals' relations to medicine use: trust in medical systems, trust in health organisations and providers and trust in personal and socially shared experiences.Despite being strongly intertwined, these different layers played different roles in decision-making. The third layer, grounded on 'lay' bases of knowledge and experience, played a major role when individuals chose between the available repertoire of therapeutic resources for minor ailments.

Introduction

In this article, I examine lay individuals' conceptions of risk, uncertainty and safety concerning therapeutic resources for tackling more minor conditions. In particular, I investigate how different trust relations influence decision-making processes for medicines consumption. My aims are to explore: how individuals articulate understandings of risk and trust concerning the therapeutic sources available to them; how trust shapes medicine use practices.

My purpose is to add to the sociological study of public trust in medicines, by

[17] Originally published as: Rodrigues, C.F. (2016), Medicines and therapeutic pluralism in Maputo: exploring modalities of trust and the (un)certainties of everyday users. *Health, Risk & Society*, 18(7-8): 385-406.

specifically considering the ways in which trust shapes decision-making in a 'non-Western' context, Maputo, the capital and the most populous city in Mozambique, by drawing on sociological and anthropological theory and combining different methods.

As a result of globalisation processes, an increasing variety of healing practices and therapeutic resources have become available in many different settings all over the globe. Such diversity, often rooted in different yet intertwined medical and knowledge systems, with different social and political statuses, also gives rise to increased complexity and uncertainty, especially among everyday users. In this article, I will consider how everyday users evaluate different therapeutic resources, how they choose amid such diversityand what are the main criteria used in decision-making processes in today's 'uncertain therapeutic world'.

Risk, trust and therapeutic pluralism

Situating perceptions of risk and relations of trust regarding medicine use

The increasing expansion of medical intervention in modern societies throughout the twentieth century has brought about 'new health consciousness and movements' (Crawford, 1980: 368), which include an increasing concern with disease prevention and health promotion. The predominant discourse around health promotion campaignstends to focus on (negative) behaviour risk factors in order to highlight the behaviour changes that would contribute to 'healthier lifestyles' and reduction in ill-health. Without underestimating the importance of such campaigns, two main critical aspects of this trend should be underlined. On the one hand, as Crawford (2004) claims when recognising the contradictions of 'medical culture':

> the continuing expansion of knowledge about threats to health, the prolific communicationand insatiable consumption of that knowledge and the professional and lay mandate toprotect and improve health together aggravate the very insecurities they are designed toquell. (Crawford, 2004: 506)

Crawford refers to this process as an 'escalating spiral of control and anxiety' (2004:506), that underpins the ways in which risk and medicine are feeding off each

other (Beck, 1992; in Bissell, Ward, and Noyce, 2001). More knowledge about risk, it is argued, engenders more control and, simultaneously, more anxiety and intolerance of uncertainty, which in turn demands more knowledge. On the other hand, as Zinn (2015) argues, this focus on 'risky behaviour' tends to rely on an expert/scientific approach, framing 'risk-taking' as irrational and often neglecting the social dynamics of such practices. Therefore, practice labelled as 'risk-taking' from a biomedical perspective can have, as my empirical examples show, a different meaning in the context and situation in which it occurs. It is thus important to turn the focus towards social understandings of risk and uncertainty, and to investigate how lay individuals frame 'risky situations' and the strategies they use to manage them.

The processes through which lay individuals interpret and understand health riskshave been described by some scholars as 'lay epidemiology' (see for example Davison, Smith and Frankel, 1991; Desmond, Prost and Wight, 2012; Frankel, Davison and Smith, 1991). This term was first used by Davison and colleagues (1991) to address the concerns of health educators regarding public resistance to health education programmes. They rejected the notion of people's beliefs and behaviours as being irrational, as well as the dichotomisation of lay and professional epidemiology. In doing so, they described lay epidemiology as resulting from a combination of both public and private discussions and observations of cases of illness and death, including 'formal and informal evidence' derived from other (mediatic) sources (Frankel et al., 1991: 428).

The sociocultural contingency of risk perception (Douglas and Wildavsky, 1982) impliedin this definition sheds some light on the limits of using the concepts of risk and 'risk society' (Beck, 1992), as defined in the sociological literature according to a western paradigm of modernity (Giddens, 1990), in the analysis of 'non-Western' societies. In exploring new ways of conceptualising risk in African contexts, Bloemertz and colleagues (2012) criticise the conceptual distinction of risks in (late) modern societies (the 'industrialised north') and in the rest of the world (the 'developing south'). Instead, they emphasise the need for a conceptual approach which more adequately accounts for an increasingly globalised world. In line with this perspective, Desmond and colleagues (2012) highlight the relevance of risk in addressing lay responses to misfortune in 'non-Western' contexts characterised by pluralistic health care systems, where individuals are exposed to both modern and traditional values. In this sense, they define risk 'as the likelihood or possibility of

danger' (2012: 149), combining hazard with uncertainty. In my analysis, I draw on this broader understanding of risk to prioritise social representationsin the context of this study.

The study of lay rationalities associated with medicine use has become increasingly important in the sociological and anthropological analysis of therapeutic consumption. Contrasting the 'rational use of drugs' paradigm based on the biomedical rationale, many studies have noticed a growing lay reflexivity, not only in relation to drugs but also to the increasing diversity of available treatment options (e.g. Craig, 2002; Fox, Ward and O'Rourke, 2005; Lopes, 2010; Lopes, Clamote, Raposo, Pegado and Rodrigues, 2012;Whyte, Geest and Hardon, 2002). Following from this perspective, some studies havedeepened the analysis of the influence of different information sources and the role of contexts of sociability in the lay management of different therapeutic methods (including Clamote, 2010; Fox et al., 2005). Others meanwhile have focused on risk perceptions and management (for example Bissell et al., 2001; Raposo, 2010) and perceived efficacy (see Etkin, 1988; Whyte et al., 2002).

Conceptualisations of trust in medical science and technologies, and particularly in pharmaceuticals, have similarly attracted increased attention (for example Birungi, 1998; Bissell et al., 2001; Britten, 2008; Brown, 2015; Brown and Calnan, 2010; Brown, Graaf, Hillen and Smets, 2015). Such trust appears to be a way of managing risk and uncertainty (see Wilson et al., 2013; Zinn, 2008). Throughout the literature, many social theorists argued for the increasing importance of the role of trust in modern societies and how ithas become a crucial concern in times of 'uncertain and global conditions' (Misztal, 1996: 9). Misztal defined trust as:

> hold[ing] some expectations about something future or contingent or to have some belief asto how another person will perform on some future occasion. To trust is to believe that the results of somebody's intended action will be appropriate from our point of view. (Misztal, 1996: 24)

This intended action concerns both the conscious intention of the action and the (emotional, technical and/or material) ability of the other to perform it. As Misztal noted, when individuals trust a surgeon, they expect both that the doctor's intentions are in their best interest and that the doctor is technically qualified to perform the task. Calnan and Rowe (2008) referred to such expectations as 'intentional trust' and 'competence trust' respectively. Yet to trust a surgeon's competence also means

trusting in the health system of which the doctor is part (Meyer, Ward, Coveney and Rogers, 2008), in the medical structure that trained the doctor and in the professional context in which the doctor works. Hence, we are talking about different layers and modalities of trust, which require brief conceptual clarification.

Luhmann (1988) has developed a conceptual framework which provides a functional approach for the analysis of the role of trust in modern societies (Misztal, 1996). He distinguishes 'confidence' from 'trust'. Accordingly, confidence relates to social/institutional systems at a macro level, for example confidence in a medical system, whereas trust relates to interpersonal relationships at a micro level, for example trust in a specific medical doctor. As Luhmann explained, '[b]oth concepts refer to expectations, which may lapse into disappointments' (1988: 97). But, he argued that in a situation of confidence, individuals do not consider alternatives, nor do they think that their actions can influence the outcome; in a situation of trust, however, a negative outcome (a risk) is a possibility, requiring higher individual engagement when deciding upon which action to take. Thus trust is only required if there is an awareness of risk. Although the terms 'confidence' and 'trust' do not have a linguistic equivalent in many languages (including Portuguese, Mozambique's official language, where both terms are translated as confiança), this conceptual distinction is an important basis for understanding different forms of trust, which is the focus of this analysis.

Giddens (1990) has also provided a useful framework for the analysis of trust relations in today's globalised contexts. He looks at the notions of 'faceless commitments', trust in abstract systems, through the confidence placed in expert systems and/or symbolic tokens versus 'facework commitments', trust in presence-based relations, such as between patient and doctor. Both are mechanisms for 're-embedding' social relations into meaningful local contexts (Britten, 2008). Britten argued that this framework:

> provides us with a way of understanding the links between the work of experts in establishing the efficacy and safety of drugs and the face-to-face interactions between patients, pharmacists, physicians, nurses and others in the context of prescribing (Britten, 2008: 16).

According to Giddens, trust in abstract systems is sustained by experiences in 'access points', where lay individuals encounter these systems' representatives. Thus, bad

experiences/encounters with health professionals can negatively influence the trust that individuals have in a medical system. However, as Meyer and colleagues (2008) argued and as my empirical examples also show, this linear analysis of trust relationships reduces the complexity of the 'web of interactions' that can also influence individual trust.

As a complex and multifaceted concept, discussions around the nature of trust and its fundamental dimensions have brought different perspectives into the sociological debate. One essential aspect emphasised by many authors is the underlying notion of trust as encompassing both cognitive and affective elements (see Calnan and Rowe, 2008; Lewis and Weigert, 1985). This implies that trust entails a cognitive process based on rational judgements of a certain degree of information but limited 'pertinent knowledge' (Barbalet, 2009), combined with an emotional dimension developed within individuals' social relationships (Lewis and Weigert, 1985). Trust, then, can be considered as an 'in between' strategy for managing risk and uncertainty (Zinn, 2008). It is neither fully rational nor irrational. Rather, emotions, intuition and individuals' experiences all play a key role in lay trust decisions (Zinn, 2008).

Following Schutzian phenomenology, Brown and Calnan (2012) have developed a theoretical framework where they explore how different forms of experiential knowledge, 'mediated', 'direct-public' and 'interactive-private', influence the construction of trust in the context of mental health services in Southern England. They show how direct-public and interactive-private are:

> forms of knowledge that are derived from face-to-face communication are more 'concrete' (less reliant on complex inferential frameworks) than the remote, abstract notions pertaining to the system. (Brown and Calnan, 2012: 37)

This conceptual division fits with the three main layers of trust relations that underpin my analysis. As I will show, these layers also refer to different forms of experiential knowledge, varying in their degree of abstractness or concreteness, of mediation andinteraction.

Using these different theoretical contributions, in this article I explore how different modalities of trust influenced decision-making processes concerning

medicine use andhow they helped to overcome perceived uncertainty and risk in a context of increasing therapeutic pluralism. Focusing on lay perceptions of the therapeutic resources availablefor minor ailments in Maputo, I argue that trust in medicines resulted from a combination of trusting relationships with different medical systems, with the medicines' institutional representatives (health facilities and workers/providers), and with individuals' own personal and socially shared experiences. In the next section, I introduce my analytical focus on *therapeutic* pluralism (rather than medical pluralism), alongside introducing the social context where the empirical data were collected.

Therapeutic pluralism in globalised contexts

From medical to therapeutic pluralism

Medical pluralism exists in almost all societies, though with uneven degrees of legitimacy and political status, especially between so-called 'modern' and 'traditional' systems (Islam, 1994). However, as social researchers have observed, these systems are neither closed nor mutually exclusive; rather, they are intertwined in many ways (see for example West and Luedke, 2006, pp. 7–8). The flow of goods, information, people, ideas, images, technologies and so on resulting from globalising processes tends to blur boundaries, such as those between 'traditional/modern', 'local/global' and 'Western/non-Western'. Furthermore, in contexts where pluralism exists, both foreign and native medicines are transformed (Whyte and Geest, 1988).

Possibly the most visible and obvious interrelation between medical systems concerns the circulation of therapeutic resources, such as medicines, within them. On the one hand, there is increasing international interest in *biodiversity* (Islam, 1994) and in the potential efficacy of indigenous plants for mass production and commercialisation purposes. For example, historical accounts of the Portuguese colonial period in Mozambique indicate that colonists were interested in and appropriated local knowledge about the management of certain substances for European medical science (Rodrigues, 2012). On the other hand, it is becoming common practice among traditional healers, at least in some African countries, to incorporate pharmaceuticals into their practices (see for example Hampshire and Owusu, 2013; Marsland, 2007; West and Luedke, 2006; Wolffers, 1988).

As concrete substances, 'any medicine, whether chemically synthesised or herbal, may be transacted' (Whyte and Geest, 1988: 5). What we find nowadays, in many different contexts around the globe, is a 'repertoire of medical resources' (Worsley, 1982: 333); or as I emphasise here, a repertoire of therapeutic resources, though unevenly accessible to individuals, both economically and geographically. More important than mapping where these resources are expected to be found, West and Luedke (2006) argue, is analysing their diversity through the ways in which different social actors 'encounter these resources as they exist on the social landscape and (re)arrange them into new constellations' (West and Luedke, 2006: 8). Moving the emphasis from the term 'medical pluralism' to 'therapeutic pluralism' highlights the increasing detachment of lay consumption practices from the systems where they originated (Clamote, 2008). This does not mean that lay relations with and discourses about medicines are not structured by particular knowledge and interpretation systems – about health, illness and misfortune, but also about the everyday world. Nor does it mean that they are unaffected by social therapeutic relations or by their own social and political status. It does, however, enable an analytical approach that is more focused on the relations with those substances that may 'permit therapy to be separated from the social relations in which it might otherwise be embedded' (van der Geest and Whyte, 1989: 346).

Increasing therapeutic diversity in Maputo

Mozambique is situated on the east coast of southern Africa. It has a total population of 26.4 million people (INE, 2016), two-thirds of whom live in rural areas. The capital Maputo is the most populous city with approximately 1.3 million people (INE, 2016), with inhabitants coming from all of Mozambique's provinces as well as other parts of the world. Located in the south of the country, it has a small central urbanised area known as 'Maputo cimento' ('the cement city'), with conventional buildings, paved roads, water, electricity and drainage systems surrounded by a larger peripheral area known as 'Cidade do Caniço' ('the cane city'), mainly characterised by shanty town neighbourhoods where most of the city's population lives (UN-HABITAT, 2010).

After gaining independence from Portugal in 1975, the first Mozambican government, led by the dominant political party, Frelimo (the Front for the Liberation of Mozambique), carried out extensive reform programmes in health, education and housing up until the 1980s. The healthcare system (accessible to less than 10% of the

population) was nationalised. The aim was to reach the entire population, expanding medicine coverage to rural areas, to prioritise preventive medicine and to give the State the responsibility for funding it (Velásquez, 1985). Access to health care facilities increased considerably during this period, from 7% of the population in 1974 to 30% in 1980 (Barker, 1983). The lack of material and human resources, together with a deteriorating economy and increasing political and military instability, however, prevented the consolidation of Frelimo's political efforts (DHS, 2013). Nevertheless, alongside developments in the pharmaceutical sector (which increased the access to pharmaceuticals from 10% of the population in 1975 to 80% in 2007 (WHO, 2007)), the introduction of neoliberal policies in the 1980s bought about a market economy and later liberalised private medicine practices in 1991 (Meneses, 2004). This increased the variety of therapeutic practices and products available in Maputo. The growth of the private sector and the possibility of importing new pharmaceuticals, outside of the exclusiveness of the National Formulary of Medicines (following the passing of the 1998 Medicines Law), was supported by a growing wealthier middle class, especially in urban areas (Russo and McPake, 2010).

In Maputo today, through different channels such as health institutions, pharmacies, shops, street markets, pyramid schemes, both formal and informal and from different geographical provenances, there is a vast repertoire of therapeutic resources including pharmaceuticals, traditional medicines and other herbal substances, Chinese traditional medicines and homeopathic drugs.

Despite the availability of products, not all resources and medical practices have been officially recognised with the same degree of legitimacy. Frelimo's post-independence modernist project, which promoted the rational and scientific thought of the *new man* (free from ignorance and superstition) rejected certain traditional practices and forms of knowledge. Thus traditional medicine practitioners were forbidden to practice as they were considered *obscurantist* (Meneses, 2004). Although this did not mean that people stopped using traditional medicine practitioners, their practice only became legal after the liberalisation of the market. The Association of Traditional Healers of Mozambique (*Associacão de médicos tradicionais de Moçambique*, AMETRAMO) was formed in early 1990s (Meneses, 2004). As Meneses noted the association provided for the social recognition of traditional medicine and practitioners, but also provided a way for the state to increase its control of these therapists.

Officially, healthcare services in Mozambique are now divided into four main kindsof providers: the public sector or National Health Service (*Serviço Nacional de Saúde*) organised in a four tier system; the private sector (run by both profit and non-profit organisations); the community sector (that covers some basic needs); and traditional medicine practitioners (MISAU, 2013). According to the *Strategic Plan for the Health Sector 2014–2019* (MISAU, 2013), the majority of Mozambicans are first seen by atraditional medicine practitioner, whose activities cover about 70% of primary healthservices in the community. Aware of its own insufficient coverage, the National Health Service also acknowledges the existence of plants with 'considerable medicinal value', as well as 'satisfactory results' in health care provided by traditional medicine practitioners. In 2010, the Ministry of Health (*Ministério de Saúde*, MISAU) created the Institute for Traditional Medicine, which aims to:

> promote knowledge and the use of Traditional and Alternative Medicine (TAM), improvethe practices of TMPs [traditional medicine practitioners], promote primary health care through this medicine, legislate and guide the practice of TAM [Traditional and Alternative Medicine] in the country (MISAU, 2013: 24, translated by the author).

However, as Granjo (2009) has argued, despite the recognition of possible active ingredients for most of the plants used by traditional medicine practitioners:

> the remaining procedures and concepts involved in the practices of *vanyanga* [traditional medicine practitioners] tend to be seen as superstition, magic and witchcraft. (Granjo, 2009: 250, translated by the author)

What is important for the present analysis is that despite the efforts to officially recognise and integrate traditional medicine practitioners and their resources into an integrated health care system, there are social, historical and political contextual processes that frame the legitimacy of the different therapeutic practices and resources in an uneven way. This may have an impact not only on lay consumption practices, but also on howlay individuals evaluate, categorise and interpret the potential risk or safety of these different therapeutic resources.

Methods

In this article, I draw on data from seven focus group discussions with a total of 42 participants plus other ethnographic material collected during 8 months of fieldwork in Maputo (from October 2013 until June 2014), which included informal conversations and interviews with members of the Ministry of Health and representatives from different health-related organisations. I also undertook some observations in pharmacies and aswell as a household survey of medicines use in Maputo City. In Mozambique, the overall research project was hosted by the Department of Sociology (through the Health and Society Research Group), Faculty of Arts and Social Sciences, of the Eduardo Mondlane University in Maputo, and received formal ethical approval from the Institutional Committee on Bioethics for Health of the Faculty of Medicine and Maputo Central Hospital (CIBS_FM&HCM) as well as all the required administrative permissions. Informed consent was obtained from all focus group participants.

The aim of the focus groups was to explore consumption experiences and conceptions of quality, efficacy, safety and risk, among other issues, for all kinds of medicinesthat are available to or known by the participants. As one of the main exploratory techniques included in the research, I strove to ensure that the composition of the focus groups was diverse in terms of participants' socioeconomic and educational backgrounds, as well as the contexts in which they were applied. The sample included university students (from history and medicine degrees), members of a local theatre group, and individuals from two different neighbourhoods, the 'Affluent' neighbourhood situated in a more privileged socioeconomic area of the city (all men and highly educated) and the 'Peripheral' neighbourhood in a slum area with poor living conditions(all women and mostly illiterate). The focus groups also varied according to the numberof participants (from 3 to 15), gender (separated in most of the focus groups, except forthe theatre group), and age (from 18 to 49 years). Despite my attempts at generating amore diverse sample, most of the focus group participants came from a higher educatedand socioeconomically privileged background and thus were not representative of theoverall population of Maputo. Although far from a homogenous group, these generalsample characteristics are relevant when interpreting the more scientific and technicalissues discussed by the participants.

Some advantages of using focus groups is that they offer insights into how

individuals interact with and discuss a range of topics and how lay knowledge is collectively constructed within different social groups (Green and Thorogood, 2014). This is especially useful during an exploratory research stage (as was the case here). It is important, however, to take into consideration other possible effects of such interactions, such as participants offering socially acceptable replies in order to express their social identity within the group. Though this may also happen in personal interviews, it is more evident within a group setting (as seemed to be the case in some focus groups with the university students). I guided the discussions towards participants' conceptions and general practices in terms of common situations and conditions, such as aches, coughs, fever, etc., that is health problems, which according to most participants tended to be managed, at least in the first instance, without recourse to a specialist. I used a thematic content approach (Green and Thorogood, 2014) to analyse the data. This involved an iterative approach in which the analytical framework was continually revised, incorporating new themes and unpredicted dimensions. This analysis was informed by Schutz's phenomenological perspective (Schutz, 1970), and I focused especially on individuals' accounts and interpretations of everyday experiences, which gave insights into their accumulated 'stock of knowledge', oriented by and structured within their life-worlds. In seeking to explore and analyse how individuals related to the available repertoire of therapeutic resources, my developing analyses led me to identify the main layers and modalities of trust, based on different forms of knowledge as these relate to experience (see Brown and Calnan, 2012).

Findings

The focus group narratives about therapeutic consumption drew heavily on notions of uncertainty, risk, safety and trust concerning both social practices (such as self-medication, non-compliance with a prescribed treatment or combining it with other treatments) and the substances themselves. While elaborating on their main criteria and reasons for choosing among the available resources, trust appeared as an important and multi-layered dimension in these decision-making processes. I found three main layers of trust relations within the narratives: trust in medical systems; trust in health organisations and providers; and trust in individual and socially shared experiences. Although these three layers are presented separately, as the

analysis will show they are strongly intertwined.

Before discussing each layer, it is important to situate the analysis in terms of participants' understandings of medicines. When talking in general terms about medicines, many types of products were mentioned, from water, if given by a person with supernatural powers, to antibiotics. The discussions around what participants considered to be a medicine also indicated what they expected from it; it could be 'something that cures', 'something that alleviates pain' or 'something that has an immediate effect'. When asked about how they differentiated between the variety of products available, there was a general tendency to highlight the main perceived differences between pharmaceuticals and all other herbal substances. However, these boundaries were not clear-cut, and Emanuel, a male history student, stated:

> In the current situation, it already gets a little difficult [to differentiate] because there are medicines that we assume are traditional, but we also find them in pharmaceutical institutions. There are medicines that we consider natural, but we also find them in hospitals.

While discussing these distinctions, as well as the logics that framed decision-making processes, which often included eclectic therapeutic itineraries, participants mentioned multiple criteria. On the one hand, there were the perceived type and intensity of symptoms or situations, for example if the disease was considered 'normal' or 'not normal'. On the other hand, there were the intrinsic characteristics of the products, namely how they are produced and/or prepared, how they are preserved, their format, how they affected the body, their efficacy, their price, as well as the place where they are acquired, and who prescribed or recommended them.

In the following subsections, I illustrate and discuss the three layers and modalities of trust, highlighting the main aspects of agreement and tension emerging from the data.

Trust in medical systems

In most of the discussions, participants talked about the general notions of trust related to the *systems* behind the products. These included systems that: produced aetiologies (and knowledge systems) about health, disease, healing, cure and well-

being; produced tools to diagnose, monitor and treat; produced experts (or specialists) that held the knowledge and could manipulate these tools. These system understandings included what participants referred to as Mozambican traditional medicine (with its cultural and geographical variations), scientific or conventional medicine, Chinese medicine, and so on.

As I have already observed, participants described some medicines as difficult to categorise. However, when talking in general terms, participants tended to focus on the principles they knew about the medical system behind them. The most debated topics tended to be those concerning the evaluation of medicines based on scientific principles, on the traditional experience of herbalists and on the spiritual guidance of healers. These distinctions were particularly evident in the focus groups conducted with university students and in the affluent neighbourhood.

According to many participants, especially university students and higher educated individuals, the advantages of pharmaceuticals when compared to other products were the scientific evidence around their efficacy, the controlled dosages and their more reliable stability. As Fernando, from an affluent neighbourhood, put it:

> I think the big difference between traditional medicines and these scientific [medicines] is the fact that traditional medicine doesn't have a precise dosage [*other participants agree*], which doesn't happen with the others. We can be using the same medicine: one goes through processing, chemical products, in order to give greater substance, conservation, and those little things; the other no. They [*traditional healers*] get us to take those little bottles where they put the water … we don't know when we should throw away the roots. We just put more water and more water, without knowing that, at a certain point, those roots will spoil the water [*other participants agree*]. That's the problem.

He continued, this time extending his discussion to include Chinese medicines:

> Chinese medicine seems [to be] a mix [of the other two, traditional and scientific], because they take the natural product and work on it. They're more hygienic, remove the impurities, and the dosage is, according to our perspective, more acceptable. While the others [*in traditional medicine*] don't. (…) They don't talk about millilitres; they talk about 'little spoons'.

By focusing on the specificities of the products, participants highlighted the perceived risk and safety elements that depend on the production system behind them. It was not a lack of trust in a healer's skills to manipulate the medicines that seemed to be at stake, but rather the uncertainty of the dosages, something that, according to this argument, was seen as controlled and predetermined in the case of pharmaceuticals, due to systematic ways in which they were produced. This argument implied a *trust in science*, in what is modern and in advanced technologies that were pre-defined, tested and controlled by an abstract and *unknown* – yet *trustworthy* – 'system'.

While science was invoked as a trustworthy knowledge system that seemed to overcome some of the risk elements of traditional medicine, the consumption of pharmaceuticals nevertheless created other concerns. As Kátia, a female medical student, observed:

> I think they [*pharmaceuticals*] are effective. Now my problem is the side effects or the harm that drugs can cause in the person's body, because it's talked about a lot, that when you consume a lot of a particular drug it can be toxic, causing damage to certain organs, especially the liver. So in that aspect I usually prefer traditional medicines.

For Kátia, the perceived risk was based on the quantity of consumption, which, when high, was also referred to by other participants as potentially resulting in dependency. Here, traditional medicines were a possible solution to dealing with the risks of toxicity and dependency. As Kátia said, 'it's talked about a lot' referring to an abstract circulating discourse and a risk awareness based on mediated public accounts (see Brown and Calnan, 2012). Yet the relationship between information/knowledge and risk awareness that emerged from these accounts shows a slightly different 'spiral of control and anxiety' (Crawford, 2004: 506). While some individuals highlighted the problem of a lack of information regarding many herbal/traditional products, others (and sometimes the same focus group participants) referred to concerns regarding the possible side effects of pharmaceutical use, due to the extent of information they were aware of. For example, Kátia continues:

> The problem is that on television and on the Internet, they speak more of the side effects of pharmaceuticals and self-medication. When I was younger, I had no trouble taking pills; if they were given to me, I would take them. But later, as I started reading, I became a little apprehensive in relation to pharmaceuticals. So I started looking for natural substitutes that I read about or that someone told me were good.

As Kátia's comments indicate the potency of pharmaceutical including their side effects was contrasted with the harmlessness of certain products, especially 'natural' ones (including traditional medicines) and this contest was evident in most focus groups. In some discussions the use of these more 'natural' products was seen as a way of avoiding or minimising the risks associated with pharmaceuticals (as other studies have also shown, see Lopes et al., 2012). In addition, some individuals linkedthe potential risk/potency or harmlessness of certain products to their efficacy: the more effective they were, the more risky they became (see also previous studies, Raposo, 2010). This link was particularly evident in the ways in which participants who were more distanced from non-biomedical options, mainly some of the university students and other highly educated participants, talked about risk and potency; although even these participants did acknowledge that they occasionally used non-biomedical options.

According to some participants, especially men with post-school education, people tended to consume traditional medicines without really questioning them. In many cases, they described a general tendency to follow some of those consumption practices out of respect for their elders, ancestors and culture. One of the examples mentioned in most focus groups was the administration of traditional medicines to babies – known as *panelinha* and *remédio da lua* (moon remedy). Most participants referred to this as a general practice in Maputo, irrespective of social class and education. While considering the conflict between administering these traditionalmedicines and the biomedical recommendation of exclusive breastfeeding, Dionísio emphasised how this 'superstitious' medicinal consumption had no 'scientific' basis. Yet when explaining why he himself did not give it to his children, he discussed thisin religious terms – his church saw these practices as connected to evil spirits rather than the moon. Fernando commented that:

> In my case, the question I ask is: 'If it does not harm anyone, it's worth not taking the risk of not giving it'. We gave it to my daughter till she was one

> and a half years old and then we started questioning … to give or not to give … (…) I come from another place where you do not do that. As she has my blood, nothing will happen.

While Dionísio was concerned about the risk of consuming this medicine, Fernando was commenting on the risks of withholding the moon remedy. Both participants linked risk with the possibility of incurring misfortune. This double effect of certain health practices,as both a way to manage and a source of uncertainty and risk, has also been analysed in other studies (see for example Coderey, 2015). Fernando's discussion, especially his willingness to give local remedies to his baby daughter even though he did not really believe in them shows how apparently different world views and relations of trust with ideological systems, whether scientific, religious, traditional or other, were entangled and were a part of individuals' daily lives – of their conceptions, interpretations and practices.

While conceptualisations of trust in certain elements associated with different systems frames individuals' conceptions regarding medicines at a more theoretical level, it does not (by itself) explain social practices. Rather, it is important to consider other layers of trust as developed through more concrete experiences and social relations in therapeutic contexts.

Trust in health organisations and providers

When considering different medicines, the second layer that emerged from the discussions involved trust relations with providers, as well as with organisations or facilities –as Giddens (1990) refers to them, the 'access points'. The health care providers included biomedical staff, pharmacists, vendors in the market and traditional healers, while the organisations involved the hospitals, clinics, pharmacies, local markets, healing churches. Both providers and organisations/facilities can be seen in many contexts as the gatekeepers of knowledge and tools. They represent and make the bridge to the previouslayer, embodying the ideological system that is behind their practice while at the sametime directly interacting with individuals.

Within the focus groups, general accounts of self-medication practices, that is consuming medicines without consulting a health professional or provider, were imbued with critical comments, highlighting the perceived associated risks. Some of these normative narratives reflected official recommendations that were circulating in

health institutions or the media, but contrasted with what appeared to be a generalised practice. For example Laura, a women in the focus group conducted in a peripheral neighbourhood, commented:

> It's not good, without a diagnosis, it's not advisable. Everybody does it, but it's not good. One must first go to the hospital to have the diagnosis, and then you'll know what you can take or not. Otherwise, I think I'm taking that [medicine] to alleviate me while I'm harming something else, causing another infection. But we're stubborn [*all participants laughed*], so we use that resource, though we shouldn't.

Despite emphasising the importance of 'running to the hospital' as soon as symptoms appeared, in practice these early symptoms tended to be managed first at home. This indicated that there was a gap between the recognition or identification of a potential risk (mainly as a result of circulating official recommendations) and how such notions were perceived and incorporated in practice (especially in relation to other risks). So while this can be considered a form of 'risk-taking', some of the reasons mentioned by participantsput this practice into a wider contextual perspective. One participant stressed the dangerof going straight to the hospital if the symptom appeared during the night, due to the lackof transportation and high crime rates in the city. Such decision-making invoked choosing between different types of risks (see for example Douglas and Wildavsky, 1982), involved in material living conditions. Other participants emphasised the lack of resources and care in the hospital. For example Adelaide, a history female student, described the problems of hospitals in the following way:

> Our hospitals are not so evolved (…). When my son is sick, I go to the hospital. I have to wake up very early, leave home at 5 a.m. to have the appointment at 10 a.m. and, after the consultation, what they prescribe me they don't have in the hospital, so I have to go to the pharmacy. So I see my time lost. I woke up at 4 a.m., went to the hospital for nothing. Andby knowing my son, the next time he gets sick I'll go directly to the pharmacy. (…) In the hospital, they don't even do examinations. They normally don't even look at the patient;only ask the name and what he feels [*mimics the doctor in a mechanical way, prescribingthe medicine without looking at the patient*]

Several other participants mentioned similar situations, and I will consider two aspects of their relationships with organisations and providers. In most of the participants' narratives, there was a symbolic relationship of trust with specific health facilities, based on their technological diagnostic tools and professional representatives. This sometimes seemed to compensate for the lack of information that was provided with the medicines prescribed. For instance, Adelaide went on to say that if a medicine was prescribed by a medical doctor and bought in the pharmacy and not at the local market, it was *per se* trustworthy. Even in situations where a clear mistrust in public health services was mentioned, many individuals referred to the use of medicines that had been prescribed by medical doctors in similar terms; claiming what Clamote (2010) has called 'expert legitimacy for consumption'.

Many participants referred to time, communication and care as important elements in the construction of a trusting relationship. Hence, it was during encounters at these access points that this symbolic trust could potentially find an interactive basis on which to crystallise. In most of the reported cases, however, this did not seem to happen. Relationships with medical doctors were described as frequently impersonal and authoritative. While this did not mean that individuals do not go to hospitals, it did appear to contribute to the adoption of other strategies in their therapeutic itineraries.

Despite these less than positive experiences in medical encounters, such experiences did not seem to have a direct impact on the trust that individuals placed in medical technology. Instead participants in the focus groups indicated that they used biomedical organisations as means to an end, as a way of gaining access to specific technologies. Several participants in the focus group and many respondents in the survey did say that going to the hospital was a way of accessing medical tests or examinations, or even medicines (at a fairly low price). Adelaide's assertion that doctors in hospital 'don't even do examinations', is indicative of the expectations of medical technologies and by implication the importance on not relying solely on doctors when deciding about medicine use. As Whyte (2004) noted in her analysis of lay interest in biomedical diagnosis (though not necessarily excluding the search for other kinds of diagnosis) in Eastern Uganda, patients valuing of examinations may not be related to the identification of a disease, but to the care they represent. Whyte observed that the use of modern technologies:

> enhance confidence in treatment and hope for a good outcome. They point towards possibilities and prospects. (Whyte, 2004: 256)

These technologies can become instruments with which to manage or control uncertainty. As 'tokens' of the medical system (Giddens, 1990), they are important forms of ritualising the process of searching for solutions and they perform a central role in relations of trust in medical institutions and professionals. Focus group participants in Maputo, observed that if a medical unit could not provide modern technologies, this tended to undermine their confidence in its ability to provide accurate clinical diagnosis.

The participants in the focus groups observed that the competence of those experts providing biomedicine was mainly based on their technical training, while in the case of traditional healers they placed greater stress on experience. Some participants, however, disputed the criterion for determining credibility. As João, a history student, explains:

> Some people are traditional doctors not because they were trained, but because of their experience.

I asked João and the rest of the participants in his focus group if the experience of the healer was a reason for increased confidence in his practice. João and Emanuel immediately replied with opposing positions. João considered this a problem due to their lack of formal training. While Emanuel described that knowing that a certain healer has a lot of experience gave him more confidence, as helping people is part of that person's daily activity.

Given traditional healers could not be judged in terms of abstract systems, the encoded knowledge and training systems of biomedical experts, more personal method were used and these included their status and standing in the community, especially the testimony of those successfully health. For example, Fernando reflected on the importance of evidence on the success of a healer:

> The choice of the medicine, as of the traditional healer, has to do with the testimony of others. People will hardly go just because there's a healer there. No. They wait for a witness.

Similarly, Abílio noted that:

> A good hospital has a good reputation, a good clinic is a good clinic, and a good traditionalhealer gets a good reputation when providing good services. Hence he is locally known.

While Abílio saw both biomedical institutions and traditional healers as having reputations, in the case of the biomedical institutions this is not linked to the reputation ofsingle named practitioners but to the whole organisation, while in the case of the traditional practitioners it is personalised.

This layer shows how relations of trust with health providers and facilities play an important role in framing trust in medicines, not just symbolically, as agents of the system they represent, but also based on their performance. Lay referral networks play an important role in validating the credibility of health providers and organisations, which links to the third layer.

Trust in personal and socially shared experiences

This last main layer of trust is evident in focus group narratives about personal and/or socially shared experiences within individuals' social networks regarding the consumption of different medicines. While pragmatism was a feature present in trust narratives pertaining to systems and organisations/practitioners, I found accounts involving other social relations to refer to a more pragmatic and embodied form of trust, where theperceived results of medicines in individuals' own bodies played a key role. Alice, a woman from the peripheral neighbourhood, indicated she trusted a medicine because it worked:

> [A medicine] is good when it gives good results, right? I had a stomach ache, I took a traditional medicine, I got better. I'm going to say that medicine is good and I'll evenrecommend it to my neighbour when she is not feeling well. With the medication from the hospital, it's also the same thing.

Alice evaluated this medicine pragmatically based on its perceived efficacy and she talked about a kind of trust based on embodied experience. This embodied experiencemay reinforce both trust in the effectiveness of the system of production,

and the compatibility between the medicine and the person (Whyte et al., 2002), and with the situation. Moreover, as previous studies have also shown (Lopes et al., 2012), the routinisation of various consumption practices tends to remove (or reduce) possible associations with risk, which can deepen the level of confidence (this seemed to be the case, for instance, with paracetamol as well as with other more widely consumed traditional herbs).

Alice's discussion also indicated that she was willing to use a pragmatic referral structure based on her own social networks recommending the medicine that worked for her, to her neighbour. This is a kind of trust that differs from the expectations placed on healers and specialists. It seems to be supported by more affective relations of social proximity to persons with whom they share broader aspects of everyday life. Despite more general conceptions about the properties of medicines (relating them to the medical system in which they are produced), as well as experiences in access points, in all of the focus groups there were examples of medicine consumption based on the recommendations of family, friends, colleagues or neighbours. Such recommendations involved advice on what to take and provided validation for taking certain medicines (Clamote, 2010). Such recommendations often involved a confirmation (or not) of the appropriateness of certain therapeutic strategies within the social network and based on local socioculturally shared understandings of health and healing. As Rómulo, a male history student, explained:

> The first cycle of advice, the first cycle of help, has been within the family itself, especially mothers. As it's said, mothers are like lionesses, [they] protect their young. So [people] have great confidence in mothers.

Participants talked about the key role that mothers, and on occasion grandmothers, played in the decision-making process in the initial period when symptoms were first evident. Participants talked about relying on experiential knowledge, their own and thatof trusted others, to choose which medicine(s) were most appropriate and, if necessary, where the therapeutic itinerary would begin. Rómulo developed his analysis of how he responded to the onset of illness in the following way:

> In my case, I won't judge … I won't lie. Experience also counts a lot. When I have aproblem, I talk to someone who had the same problem and

> if the person tells me that 'I did this and this, and the best was this' I will also try it.

Many participants talked about the practice of 'searching for results' and how this pragmatism led them to try different resources, while not necessarily losing their more general confidence in the elements they previously emphasised. As Rómulo said, 'I will also try it', highlighting that relying on someone's advice or experience did not necessarily remove uncertainty, but could form a means of reducing it.

Hence, even though the participants in the focus groups accepted the value of the scientific principles of pharmaceuticals, they also talked about the role and value of (close) members of participants' social networks and to their own knowledge. For example, Kátia said:

> I trust more in a hospital than in a traditional healer, but I prefer natural remedies that are proven to be effective.

I asked Kátia how she verified such 'proof', since most of the focus group discussion of proof of efficacy related to the scientific standards of proof. It was clear from her response that she was relying on personal endorsement as proof of efficacy:

> I cannot see it [the proof]. But … for example, if someone from my family says they [the natural remedies] worked, I don't see a reason not to try, but I try when someone I trust tells me it's good.

In referring to 'someone from my family', 'someone I trust', this again indicates a different kind of trust from the trust (or confidence) in medical systems or in organisations and providers. It relies on relational and intimate ties, rather than on professional expertise. This example, and many others that I found in participants' accounts, illustrates a key point. Although individuals' accounts referred to many different relationships and modalities of trust with healthcare providers, institutions, medical systems and the like, ultimately participants described more pragmatic and embodied form of trust, based on lay experiential knowledge, as being central to their decision-making; especially when more uncertainty and multiple choices were seen to exist.

Discussion

Sociologists have acknowledged the analytical value of studying social understandings of risk and how these shape individuals' health-related choices and practices. As I have noted classical conceptualisations of risk framed by western-oriented notions of modernity, such asthose of Giddens (1990) and Beck (1992) are grounded in a scientific and technical rationality (Crawford, 2004) enabling individuals and organisations to predicate and mitigaterisk. Such conceptualisations have been challenged. I have drawn on arguments that risk conceptualisations need to be reframed in order to incorporate (rather than segregate) the sociocultural specificities of other (global) modernities or forms of social organisation (see Bloemertz et al., 2012; Desmond et al., 2012; Douglas and Wildavsky, 1982). In this sense medicines and proliferating therapeutic pluralism, constitute a useful focus through which toexplore different nuances of social and cultural interpretations of uncertainties and risks associated with therapeutic consumption. This is especially so in terms of how usersevaluate, rank/classify and organise their choices (Douglas and Wildavsky, 1982; Raposo, 2010) amid constantly changing therapeutic landscapes.

Different notions of risk are embedded in 'lay' discourses concerning both substances and consumption practices. Similar to the notion of lay epidemiology (Davison et al., 1991), I found a combination of elements derived from multiple information sources as well as traces of different aetiologies. As the literature (for example Luhmann, 1988; Wilson et al., 2013; Zinn, 2008) and my empirical examples also make clear, risk andtrust are intricately intertwined. For participants in my focus groups trust was an important dimension influencing both conceptions of risk and the social practices in response to such perceived risks. In this article, I have explored how different modalities of trust interweave to shape social understandings and everyday practices around medicines use for minor ailments in Maputo.

As I have shown, the lay accounts of the focus group participants were grounded in three main layers of trust framing individuals' relations with medicine use: trust in medical systems, trust in health organisations and providers and trust in individual and socially shared experiences. Though strongly intertwined, these layers had uneven weighting within individual decision-making.

Trust in the medical system involved associations between medicines and

understandings of the medical systems with which the medicines were associated. By stressing the perceived risk and safety elements of different products, special attention was given to evaluations of science versus experience, processed versus natural, and efficacy versus safety. This echoes findings from previous studies that have shown how the meaning of pharmaceuticals and 'indigenous' medicines is established by contrasting them with one another (for example Sussman, 1988; Whyte et al., 2002). These continuous comparisons cut across all three layers.

Participants' accounts showed how their rationales and practices regarding therapeutic resources resulted from a combination of complexly entangled elements of different knowledge systems. These conceptions both structured and were structured by relational trust with health organisations and prescribers, sellers and healthcare providers in general, forming the second layer of trust. These organisations and providers were frequently the representatives of ideological systems and the gatekeepers of knowledge and tools who directly interacted with individuals (Giddens, 1990). There was, therefore, a symbolic relationship of trust (or distrust) with these different entities, according to what they represented. Such semiotic understandings were in turn incorporated into the evaluationsof medicines that were produced, prescribed/recommended and dispensed by them. As I have shown, however, it was during such moments of contact that these symbolic relationships of (dis)trust were more or less able to crystallise. This not only related to the personal performance of the providers – as 'medicine is imbued with the qualities and intention of the giver' (Nichter and Nordstrom, 1989: 379), but also to the availability of technological resources. This therefore made up a part of the situational aspects (Pedersen, Hansen and Grünenberg, 2016) that went beyond the motivations and technical skills of providers (Calnan and Rowe, 2008), to constitute other forms of care (Whyte, 2004). Here participants described the ways in which practitioners needed to show notonly their emotional but also their technical and material ability (Misztal, 1996) to respond to the patients' expectations and needs. Overall (dis)satisfaction with a service (generally evaluated in terms of results) established a reputation for the organisation or provider that would be shared within lay social networks.

The third layer of trust was rooted in personal or socially shared experiences with medicines in specific situations. Despite the more technical and/or normative discussions around different products and the contexts in which these were

prescribed or dispensed, most of the focus group narratives regarding consumption practices for minor ailments emphasised the key role of individual lay referral in the decision-making process. This included both participants' own embodied experiences with the products and the experiences and advice of relatives (especially mothers and grandmothers), friends and neighbours. These appeared as different forms of trust, supported by more affective relationships of social proximity with individuals who tended to share broader aspects of their everyday lives.

By this latter layer of trust, I emphasise the emotional dimension incorporated into the cognitive processes (Barbalet, 2009; Calnan and Rowe, 2008; Lewis and Weigert, 1985). These networks of relatives, friends and neighbours not only contributed to setting up an interpretative background based on which risks and safety elements, including the assessment of medicines' efficacy, were evaluated. In cases of particularly close relationships, this may also add a further element of trust in terms of their ability to act as 'lay advisors' regarding therapeutic consumption for minor ailments. This role would, however, appear to differ from the 'competence trust' referred to by Calnan and Rowe (2008). It may, for instance, have less to do with medical technical knowledge and more with thorough personal knowledge of the individual (Feierman, 1985) and the appropriateness of certain products and procedures given the situation and the person.

Maputo has in the last decades seen enormous social, political and economic changes, including rapid urbanisation and migration, through which inhabitants are increasingly exposed (more so than in rural areas) to a continuous flow of information, ideas and objects. In such a global setting, more 'modern' and more 'traditional' forms of social organisation and aspirations are complexly combined and transformed, and are constantly shaping and being shaped by various social actors (Giddens, 1990). The different local cosmologies resulting from these processes were visible in my respondents' narratives, where the 'virtues and values of *modern man*' (Pitcher, 2002: 73), that privilege 'rational' and scientific thought (particularly emphasised by some of the participants who had (or who were studying for) university degrees), were combined with other understandings and logics. This was also indicative of how these more individualistic processes, that medicines, and especially pharmaceuticals, also promote and enable, functioned hand in hand with other more traditional forms of social solidarity (Zinn, 2008: 441) and survival (Costa, 2007). The role of social networks (especially relatives and neighbours) thus continued to be essential in the

management of manyaspects and domains of social and individual life.

Lay trust networks were nevertheless dynamic and were mobilised differently according to individuals' specific needs and/or interests. This pragmatism enabled individualsto manage pluralistic consumption practices by navigating through both their trust networks and the available repertoire of therapeutic resources, in attempting to bypass perceived risks and uncertainties.

The three layers of trust at the centre of my analysis resonate with Brown and Calnan's (2012) categorisation of experiential knowledge in which more direct interactive experiences (public, but especially private) provide a stronger ground for developing trust than more remote forms of mediated experiences (where trust in systems is situated). In this article, I have added to this categorisation the embodied form of experiential knowledge, which is a step further in terms of phenomenological concreteness (see Schutz, 1970), alongside a more pragmatic relationship with availableresources.

Trust is a process in constant construction and transformation through daily interac tions and experiences. The different modalities of trust I have identified can be understood as located and developing within an individual's life-world and based on his/her everyday 'store of experience' and 'stock of knowledge' (Schutz, 1970). Amid these life world structures of knowledge, layers interweave as more pragmatic and embodied forms of trust prevail in decision-making. These latter features of trust were especially evident when uncertainty and multiple choices existed.

Conclusion

The increasing circulation of therapeutic resources in Maputo, through different distribution channels, both expands the possibility of choice for consumption and increases complexity and uncertainty regarding the repertoire of therapeutic resources available in the sociocultural (and economic) landscapes of everyday medicines users. As I have shown, all medicines (whether 'natural' or 'processed') are imbued with different perceptions of risk, uncertainty and safety. It is within these complex and uncertain contexts that trust can be seen to appear in lay discourses as a strategy to bring back confidence in medicine consumption, often resulting in pluralistic consumption practices.In order to analyse these different modalities of

trust in a scenario of therapeutic pluralism, I focused the discussion on minor ailments and therapeutic resources that can be managed without total dependence on a provider. However, these layers mightplay a different role when major health problems are at stake. In such cases, other conceptual distinctions may need to be considered, such as those between trust and hope (Brown et al., 2015) as well as between trust and dependency (Gilson, 2003; Meyer and Ward, 2013). Moreover, further research is necessary in order to gain a deeper understanding of how these different and complex trust relations are constructed within each layer.

'Home pharmacy', Maputo (2016)
Photograph taken by Carla Rodrigues.

Chapter 3

Self-medication with antibiotics: practices, rationales and relationships[18]

Abstract

Self-medication, as a form of self-care, is a common practice worldwide, and often involves the use of both over-the-counter and prescription-only medicines, including antibiotics, anti-malarials and others. Increasing concerns over the global emergence and spread of antimicrobial resistance point to the need to reduce and optimise the use of antimicrobial medicines, both in human and animal health. Over the past few decades, numerous studies on self-medication with antibiotics have sought to determine the prevalence, risks and/or factors related to 'inappropriate' use in different parts of the world. Yet much of this literature tends to follow a rather normative approach, which regards such practices as problematic and often irrational, frequently overlooking structural aspects, situated circumstances and individuals' own reasoning. Based on a mixed methods social science research project in Maputo, which included a household survey, observations in pharmacies and interviews with users and healthcare providers, this paper aims to discuss self-medication in light of local users' everyday practical reasoning. While situating self-medication within local contextual contingencies, the analysis highlights the ways in which personal and socially shared experiences, articulated with forms of knowledge and information provided by different sources, shape and inform practices of and attitudes towards self-medication with antibiotics. By looking at self-medication beyond (non-)prescription use, and by examining individuals' decisions within their socioeconomic and therapeutic landscapes in Maputo, this study sheds light on the structural and relational factors that contribute to certain consumption practices that do not always follow biomedical recommendations of 'rational' or 'appropriate' use, helping to deconstruct and further problematise the various legitimate meanings and understandings of 'responsible' use.

Introduction

Practices of self-medication, as a form of self-care, have always triggered controversy. Yet they are common worldwide. Self-medication often involves a combination of

[18] Originally published as: Rodrigues, C.F. (2020), Self-medication with antibiotics in Maputo, Mozambique: practices, rationales and relationships. *Palgrave Communications*, 6 (6).

therapeutic resources and the use of both over-the-counter (OTC) and prescription-only medicines, including antibiotics. Increasing concerns with the global emergence and spread of antimicrobial resistance (AMR) have pointed to the need to reduce and optimise the use of antimicrobial medicines (AMs), both in human and animal health (WHO, 2015a). This includes tackling the use of AMs without a prescription, which is considered a form of AM 'misuse' that can potentially accelerate the emergence of resistant microorganisms (WHO, 2015b). Over the last decades, numerous studies on self-medication with antibiotics, conducted in different parts of the world, have sought to determine the prevalence, risks and/or factors related to 'inappropriate' antibiotic use (e.g., Borg and Scicluna, 2002; Grigoryan et al., 2007; Elmasry et al., 2013; Albawani et al., 2017; Alghadeer et al., 2018). Although tracking OTC sales is challenging in most countries (WHO, 2015b), according to a review of Alhomoud et al. (2017: 4), "it has been estimated that more than 50% of antibiotics are purchased without a prescription and used over-the-counter in most parts of the world".

Much of the literature on self-medication with antibiotics, however, tends to follow a rather normative approach, which regards such practices as problematic and often irrational, frequently overlooking structural aspects, situated circumstances and individuals' own reasoning. Moreover, in framing antibiotic use and ultimately AMR as an 'individual behaviour' problem— which needs to be 'corrected' through regulatory restrictions and educational campaigns—such approaches neglect broader contextual and relational processes in which antibiotics and other medicines are embedded (see e.g., Tan, 1999; Rodrigues, 2016; Lambert et al., 2019; Willis and Chandler, 2019), which contrasts with the recognised 'connectedness' as promoted by the rhetoric of the 'One Health' approach (Chandler, 2019).

Adding to this broader discussion on AM use, and drawing on a social science research project on medicine use in Maputo, Mozambique, this paper aims to analyse and problematise antibiotic consumption practices beyond (non-)prescription use. I start by unpacking and discussing the very notion of self-medication, the rationales and ideologies behind it, as well as the processual backgrounds which have contributed to the spread and centrality of pharmaceuticals in individuals' everyday lives and self-care practices. This will set the theoretical background and analytical framework, which will help to shed light on the situated rationales behind certain consumption practices and on the various meanings and understandings of 'responsible' use.

Self-medication: theoretical background

Discussions of self-medication tend to revolve around its risks and benefits (WHO, 2000), and there are different approaches regarding its legitimacy. While the medical community tends to reject most self-medication practices, emphasising health risks and the need for expert diagnosis, public authorities tend to be more tolerant, highlighting the economic advantages for managing minor ailments (Fainzang, 2017). One way of overcoming such divergences has entailed reframing some of these practices as 'responsible self-medication' (WHO, 1998). Yet, what a 'responsible' practice is may have different meanings and implications according to situated circumstances.

While different definitions of self-medication can be found throughout the literature, they generally refer to "the selection and use of medicines by individuals to treat self-recognised illnesses or symptoms" (WHO, 1998: 3). Within social science literature, scholars have also taken different approaches to what they consider self-medication (see e.g., Fainzang, 2017: 2). Lopes (2003), for example, looked at multiple uses of pharmaceuticals without a medical indication. These included medicines bought without a prescription (regardless of possible orientations from pharmacists), as well as the use of medicines previously prescribed for perceived similar situations, which were not always seen by consumers as a form of self-medication. The variation in such interpretations highlights the importance of further deconstructing the multiple dynamics in and *lay* logics behind these practices. As Fainzang (2017: 44) highlights, the 'intellectual operation' of taking an anti-inflammatory for a pain medically diagnosed in the past is different from using a painkiller for an unknown situation while monitoring its developments. Such analysis thus entails moving the focus from 'rational use' to the 'rationales for using' medicines (Nichter and Vuckovic, 1994), or in this case, to the rationale(s) for self-medicating (Lopes, 2003).

To a certain extent, as Hardon (1991) and Van der Geest et al. (1996) have argued, all medicine use is a potential form of self-medication, since its administration is often conducted outside of health professionals' control. This broader approach to self-medication allows us to take into consideration other more nuanced aspects of medicine use, including the management of prescribed medicines. This is particularly relevant for understanding different modalities of use around certain medicines, such as antimicrobials, whose prescription regimens normally imply strict compliance. Therefore, despite maintaining an analytical distinction between self-initiated

consumption practices and *lay* adjustments to medical prescriptions, in this paper I will use this broader conception of self-medication. The aim here, however, is not to incorporate the study of compliance into self-medication practices. Compliance is a 'value-laden term' (Donovan and Blake, 1992) embedded in a normative and medical-centred perspective (Conrad, 1985), which tends to frame variations to medical prescriptions as a form of deviance (*idem*; see also Stevenson et al., 2002). Such an approach often fails to recognise and understand the 'various legitimate rationalities' (Cohen et al., 2001) in medicine use, as highlighted above. Acknowledging the legitimacy of multiple, and sometimes overlapping, modes of reasoning brings complexity and further enlightening insights to the otherwise dichotomised conception of rational/irrational use (see e.g., Britten, 2008; Craig, 2002; Etkin and Tan, 1994; Whyte et al., 2002). As these and other studies have shown, and as the empirical examples in this paper will also illustrate, it is important to study medicines as social, political and economic phenomena, in order to contextualise and understand the reasoning behind different forms of use, but also their significance in modern therapeutic consumption practices.

Processes of medicalisation (Zola, 1972; Conrad, 1992) and the commodification of health (Nichter, 1989) gave rise to the increasing use of pharmaceuticals as a privileged therapeutic solution for health problems – both for prescribers and users. Such a phenomenon, described in the sociological literature as the 'pharmaceuticalisation of society' (e.g., Abraham, 2010; Williams et al., 2011), has resulted in the widespread use of medicines to manage gradually more and more aspects of individuals' everyday lives. Increased access to both biomedical healthcare, as well as to contact with health professionals or agents has contributed not only to the social dissemination of biomedical concepts of health, disease, well-being and care, but also to the dissemination of prescribed pharmaceutical solutions. This has resulted in a general increase in pharmaceutical consumption, and consequently a gradual increase in *lay* familiarity with such therapeutic technologies (Lopes, 2009). The expansion of pharmaceutically-driven solutions has furthermore characterised what Biehl (2007: 1100) has called the 'pharmaceuticalisation of public health'; in other words, the "delivery of technology regardless of health care infrastructures", otherwise known as so-called 'magic bullet' approaches (see also Cueto, 2013), which for decades have dominated international health interventions (Biehl and Petryna,

2013)[19].

These processual backgrounds, together with medicines' pharmacological, social and symbolic efficacies, and their potentially 'liberating' effects (Whyte, 1988; Van der Geest and Whyte, 1989), are key to understanding the spread and centrality of pharmaceuticals in individuals' everyday lives and, in particular, their presence in self-care practices. As different scholars have pointed out, self-medication can be seen as a source of individual empowerment, offering a certain autonomy in treatment decisions (Fainzang, 2017) and freedom from professional dominance (Van der Geest et al., 1996). It may, however, also contribute to a greater dependence on the pharmaceutical industry (Van der Geest, 1987; Nichter and Vuckovik, 1994) or on expert systems (Lopes, 2009), shifting the exclusive emphasis even further away from prescribers towards the substances and the multiplicity of other social, economic and political structures and relations surrounding medicine use, particularly in self-medication practices. To understand self-medication practices, it is therefore important to take into consideration the multiple contextual aspects, reasoning and dynamics that may differentially influence how individuals relate to medicines (or medical technologies), as well as their therapeutic options and decisions in different situations. These include, as numerous studies have highlighted, contextual economic infrastructure, drug regulations, the functioning structure of health systems, and the role of both formal and informal sectors in pharmaceutical and healthcare provision (e.g., van der Geest, 1987; Van der Geest and Hardon 1990; Kamat and Nichter, 1998), but also local cultural (re)interpretations of medicines, individuals' financial constraints, access to reliable information and *lay* practical experience (e.g., Nichter, 1980; Bledsoe and Goubaud, 1988; Hardon, 1991; Tan, 1999; Lopes, 2009).

In this paper, I aim to add to these contributions by examining self-medication practices in light of the everyday practical reasoning (cf. Horlick-Jones et al., 2007) of local users in Maputo. While situating self-medication within their contextual contingencies and wider therapeutic consumption practices and relationships, I analyse how individuals' own and socially shared experiences, articulated with information provided by different sources, shape and inform their practices and attitudes towards self-medication, particularly with antibiotics. Combining different methodological approaches, including the collection of qualitative and quantitative

[19] The underlying rationale of such pharmaceutically-driven approaches, especially in Low-Income and Middle-Income Countries, seems now to contrast with current global health efforts to prevent and further regulate the overall use of antibiotics.

data, and focusing on the management of common symptoms—thus not looking exclusively at antibiotic use—have provided richer insight into the place of antibiotics in individuals' everyday lives.

In the following sections, I will briefly describe the study setting and present the methods used to collect and analyse the data. The main findings of this study will then be presented and discussed in the last sections of the paper.

Setting

Maputo is the capital and most populous city of Mozambique, with approximately 1.1 million people, and is situated on the east coast of southern Africa (INE, 2019). The city has a small central urbanised area with conventional buildings, paved roads, water, electricity and drainage systems, and is surrounded by a larger peripheral area, mainly characterised by shanty town neighbourhoods, where most of the city's population lives (UN-HABITAT, 2010).

Extensive reforms and developments in the health and pharmaceutical sectors since the country's independence in 1975 have improved the population's access to public healthcare facilities, as well as the supply and distribution of essential medicines (Barker, 1983). Despite significant improvements in the last decades, however, Mozambique's health sector still faces multiple challenges. The country's health profile and disease burden are largely dominated by communicable diseases, especially HIV/AIDS and malaria (together responsible for over half of deaths in the general population), followed by diarrhoeal diseases, respiratory infections and tuberculosis (MISAU, 2013). Besides improvement needs in areas such as nutrition, access to safe water, sanitation and basic health services, the country's epidemiological disease patterns are also determined by climate conditions and variations, not only regarding seasonal-related diseases (during both rainy and dry seasons), but also due to the country's vulnerability to natural disasters such as floods and cyclones (*idem*).

Developments in the pharmaceutical sector in the last decades have also resulted in significant changes. The national formulary to regulate the use of medicines within health services, published in 1977 (and last updated in 2017), reduced the number of required medicines in order to achieve more cost-effectiveness, and was accompanied

by legislation that allowed the prescription of generic drugs only (Barker, 1983) – which may be the reason why most individuals know most of their antibiotics by their active ingredient rather than by their brand name. The introduction of neoliberal policies in the 1980s and the Medicines Law – *Lei do Medicamento* (nr. 4/98) – of 1998 both expanded the private pharmaceutical sector in the country. The population's access to pharmaceuticals increased from 10% in 1975 to 80% in 2007 (WHO, 2007), and in 2012 there were a total of 293 pharmacies in the country – 60% of which were concentrated in Maputo (MISAU, 2012). Such a proliferation of pharmacies in the capital city made pharmaceutical products more easily accessible. Despite legislative restrictions to control the sale of certain medicines (such as antimicrobials), in many pharmacies some of these drugs are available without a prescription. Moreover, pharmaceuticals in Maputo circulate through multiple channels and, as in many other African countries (see e.g., van der Geest, 1987; Jaffre, 1999; Baxerres and Le Hesran, 2006; Sanchez, 2016), a variety of medicines, including different types of antibiotics, are widely available in local informal markets.

Methods

The quantitative and qualitative data supporting this paper were collected during a total of ten months of fieldwork in Maputo city, divided into two phases. The first phase of data collection (2013–2014) included observations of client–provider interactions in pharmacies, exploratory interviews and informal conversations with practitioners and representatives from different health-related organisations, the conducting of seven focus group discussions (FGDs, n=42), and the application of a household survey (n=265, one person per household) in fifteen randomly selected neighbourhoods in Maputo city. The questionnaires were applied by 8 undergraduates studying sociology at the Eduardo Mondlane University (UEM). These students were trained, supervised and accompanied to the neighbourhoods by the author. The survey respondents had multiple religious and ethnic backgrounds; their ages ranged from 18 to 87 years (mean 34); 68.7% were female and 31.3% were male; a slight majority was employed (37.7%) and/or students (27.9%). Besides their housing characteristics (and the neighbourhoods they lived in), respondents' economic conditions were also measured based on the ownership of durable home assets and access to services. This was assessed on the basis of 11 items (adapted from the socioeconomic indicator used in MISAU, INE, and ICFI, 2011), ranging from the

most common – such as electricity, piped water, TV and radio – to the scarcest – such as access to the Internet, a car, a motorcycle or a bicycle. While half of the respondents had access to the five most common items, only 9% possessed them all. Socioeconomic status differed significantly according to the district the respondents lived in (with a higher concentration of individuals with more possessions/access in the more affluent areas in the city centre), and it was positively related to their educational level (the higher the level of education, the higher their economic status). The quantitative data were analysed using IBM SPSS Statistics 20.

In the second phase of fieldwork (2016), more in-depth qualitative data were collected. Repeat follow-up interviews (2 to 3 encounters) were conducted with 17 participants (15 from the household survey and 2 from the FGDs) and 10 key informants (including practitioners from different health-related organisations) to explore further the main initial findings. The 17 in-depth interviewees were selected from 10 different neighbourhoods in Maputo city, ranging from more affluent and semi-affluent areas of the city centre to more peripheral neighbourhoods (where most study participants lived) as described above, with an attempted balance in terms of sex (nine men and eight women), age (from 21 to 59) and school level (from 10th [secondary] grade to university studies). All interviews were recorded and transcribed. After an initial thematic analysis (Green and Thorogood, 2014), a phenomenological approach (Schutz, 1972) was used to look at individuals' experiences when managing common ailments, and their interactions with health professionals – both prescribers and dispensers. Particular emphasis was also given to their perceptions of risk and safety, and (un)certainties regarding antibiotic use and self-medication practices, based on various and multifaceted knowledge and information sources. As I will explore later in this paper, the lack of a shared understanding around the term 'antibiotic', as detected during the exploratory phase of the study, required some adjustments to be made to how the questions were framed, both in the questionnaires and in the follow-up interviews. In the household survey, when asked about the last antibiotic used, backup examples of common terms among the community, as well as the most common antibiotics in Maputo were provided. Despite the precautions taken, it is important to acknowledge that this vocabulary dissonance may have influenced some of the information shared by the study participants, as analysed in the following section.

In Maputo, the research project was hosted by the Department of Sociology

(through the Health and Society Research Group), Faculty of Arts and Social Sciences, UEM. It received formal ethical approval from the Institutional Committee on Bioethics for Health of the Faculty of Medicine and Maputo Central Hospital (CIBS_FM&HCM), as well as all the required administrative permissions. Written informed consent was obtained from all individuals from the community who participated in the FGDs, the household survey and the individual interviews. All other informants gave oral consent. Apart from the face-to-face application of the household questionnaires, all data collection was undertaken by the author.

Findings

The empirical data on self-medication is structured around five main sub-sections, through which different dimensions of individuals' everyday practical reasoning will be unfolded. A brief statistical overview of reported self-medication practices is followed by a thorough analysis of the more in-depth qualitative data, which explores how antibiotics are managed at home; the importance of the standardisation of medical prescriptions; the significance of experiential knowledge and the role of (and access to) different sources of information; and, finally, the contextual contingencies and realities of healthcare provision and therapeutic encounters, which also contribute to self-medication practices.

Self-medication practices: statistical overview

The household survey applied in fifteen neighbourhoods in Maputo city entailed two different approaches for capturing medicine use. The data analysed in this article refer to two sets of questions related to *therapeutic consumption practices and itineraries*. One focused on how individuals had managed the last time they felt each of three common symptoms—fever, cough and diarrhoea—as identified during the exploratory part of this research[20]. The other question focused on the last time they used specific therapeutic categories such as painkillers, antibiotics, vitamins and calming pills[21].

[20] The questions were posed in both Portuguese and Shangane, and the main questions included: *The last time you felt fever/cough/diarrhoea; what did you do; why; did you take any medicine—if so: what did you take, who advised you, where did you get it, for how long did you take it, did it solve the problem?*

[21] The main questions included: *When was the last time you took an antibiotic (examples provided, if needed); what was the purpose; what did you take; who advised you; where did you get it; for how long did you take it; how many pills per day; how do you evaluate the results?*

With variations in terms of symptoms and therapeutic categories, overall 76.2%[22] of respondents reported having used medicines (pharmaceuticals or others) on their own initiative or following the advice of relatives or friends. Reported self-management with medicines was highest in cases of diarrhoea, followed by cough and finally fever. However, and similar to findings in other studies (e.g., Adome et al., 1996), while in most cases of fever (around 95%) a pharmaceutical (mostly paracetamol) was used, the reported self-management of diarrhoea, and especially cough, included the use of traditional medicines and home remedies. Only in very few cases, spread across all three symptoms, was the use of antibiotics reported.

Focusing on the second set of questions, 20.8%[23] of respondents mentioned the use of antibiotics within the month prior to the survey. Of those who reported having ever used antibiotics in the past[24], 26% said that the last time they had done so was based on their own initiative (14.5%) or following advice from relatives (10.1%) or neighbours (1.4%). So, while antibiotics did not seem to be a first resort when self-managing the last appearance of common symptoms, as shown above, the high percentages of self-medication with antibiotics do indicate that they are available and are used when there is a perceived need.

When comparing the reported data on the reasons for both prescribed and non-prescribed antibiotic consumption, the differences do not seem to vary substantially. The use of antibiotics without a prescription was mainly for cough, pain in some part of the body, wounds and fever. By and large, these were also the main reported reasons (also described in terms of symptoms) for using prescribed antibiotics. Moreover, the most commonly used of the non-prescribed antibiotics was amoxicillin, followed by cotrimoxazole—which is also in line with the antibiotics most frequently bought in informal markets in Maputo (Maputo City Council, 2017); according to the study participants, including the interviewed clinicians and pharmacy workers, these were also amongst the most commonly prescribed antibiotics[25].

[22] Referring to data from both sets of questions.

[23] Referring to data exclusively from the set of questions regarding antibiotics.

[24] Of the respondents, 18.8% said they had never used antibiotics, even after the provision of examples of the most common antibiotics in Maputo, as well as other more commonly known terms/terminologies for antibiotics among the community.

[25] According to GARP-Mozambique (2015: 2), the high rates of resistance to cotrimoxazole in the country is also a result of "[t]he widespread use of cotrimoxazole as a first-line treatment for acute respiratory infections, as well as to prevent opportunistic infections in people with HIV/AIDS."

'Home pharmacies' and first aid medicines

The follow-up contacts with some of the survey respondents and FGD participants resulted in repeat encounters with a total of 17 individuals. One of the qualitative approaches I used to explore medicine use was to look at the medicines that individuals had in their households, here referred to as 'home pharmacies[26]'. As Dew et al. (2014: 40) have argued, "households are a central site of health practices and decision-making". Study participants were asked to show me whatever they considered to be a medicine. This included a variety of substances with perceived therapeutic properties: from pharmaceuticals stored in bedroom drawers, to therapeutic herbs grown in the backyard, to 'holy water' which had been blessed at the church or given by someone with 'supernatural powers'. This was a useful strategy for redirecting some more general questions towards more concrete practices, and as a starting point to probe consumption practices that would otherwise have been left out of the study.

Fig. 1 'Home pharmacy' in Maputo (city centre), displaying a combination of medicines available in the household. Photograph taken by the author.

Stored pharmaceuticals included those being taken in current treatment, leftovers from previous treatments, medicines bought for possible future situations[27], and prescriptions that had been bought and never used. The number of pharmaceuticals stored at home was substantially higher in more privileged households, and in some of the most resource-limited households only one or two pharmaceuticals were

[26] 'Home pharmacy' is used in this paper as a translation of the Portuguese term *farmácia caseira* (see e.g., Diehl and Almeida, 2012).

[27] This was the case for antibiotics only in two of the most privileged households.

available. Figure 1 displays a 'home pharmacy' in the city centre and is illustrative of what I found in many other households: the predominance of a therapeutic pluralism (cf. Rodrigues, 2016; see also Clamote, 2008; Lopes, 2010) that, in this case, combined pharmaceuticals with Mozambican and other African traditional medicines and herbs, as well as Chinese teas. Among them, as we can see in the picture, was amoxicillin.

Around half ($n = 8$) of the houses I visited had antibiotics (bought with or without a prescription), none of which were being used at the time of the interview. The reasons for having leftovers of prescribed antibiotics at home varied. Some study participants had stopped taking the antibiotics once they felt better, or had forgotten one or two doses and had thus decided to stop the treatment altogether. In other cases, the number of pills in the boxes was reportedly higher than the dose prescribed. While in hospital pharmacies medicines were dispensed as a single dose (with the exact number of pills administered according to the prescription), in private pharmacies antibiotics were often sold in fixed-sized packages. In such cases, individuals tended to keep the extras at home for future use (for example, using the contents of capsules on wounds).

Not all antibiotics present in the visited households, however, had been bought with a prescription. In a few cases, they were bought and stocked as a preventive strategy for recurrent situations. This was the case for the home pharmacy illustrated in Fig. 1, which belonged to a highly educated 38-year-old woman, mother of three young children, who had three main pharmaceuticals as part of her home first aid kit: paracetamol, ibuprofen and amoxicillin.

> These are the little things I have for first aid. Your head hurts, I give paracetamol. You have tonsillitis, or you are getting the flu, I give amoxicillin with paracetamol together. (…) I don't expand myself to things I do not know. I don't go to the Internet very often. I know people who are there, self-medicate, they look like doctors! (…) The pills in my house are three: paracetamol, amoxicillin and ibuprofen. (Woman, 38 years)

This woman described how she had learnt to treat these common symptoms from her mother, while growing up in a time of scarce access to healthcare following Mozambican independence. At that time, it was, according to her mother, safer to treat at home than to go to a hospital. This respondent's reliance on such knowledge, which

had been passed on from a previous generation and which had also been validated in her current practices with her own children, seems to suggest that there are variations in terms of legitimate self-medication practices. Her perceived cognitive control over a small number of medicines and health conditions seemed to be a way of distancing herself from other self-medication practices that have a widespread negative connotation.

The circulation of medicines, as well as of recommendations regarding their use in specific events, was a common practice among family members, friends and neighbours. Such recommendations were often based on medicines they had tried themselves in the past—whether recommended by a health professional or as part of community referral chains within the 'lay referral system' (Freidson, 1960). In this latter case, an expert referral, given to the first individual in the *lay* referral chain, would eventually get lost along the prescribed person's social network. This was especially the case in situations perceived as non-severe or not serious enough to visit a doctor, where pharmaceuticals appeared as quick and effective fixes, not only in helping to alleviate certain symptoms (especially pain), but also in terms of enabling individuals to go on with their daily lives and routines. Painkillers (especially paracetamol) and anti-inflammatory medicines (ibuprofen[28], but also diclofenac) were among the most popular medicines in self-medication practices and were broadly considered to be 'safe'. As a 42-year-old male interviewee said, smiling, while referring to the use of paracetamol to alleviate pain: "I can say it is already tradition".

Despite the popularity of certain antibiotics, particularly amoxicillin, their recommendation and circulation within individuals' social networks tended to be more restricted when compared to other pharmaceuticals. In most cases, antibiotics had been prescribed or recommended by a health professional (medical doctor, prescribing nurse or pharmacy worker) in the past, and their efficacy had been validated through an individual's own embodied experience. Hence, one of the primary sources of knowledge, and of legitimacy, in self-medication patterns with antibiotics was a previous prescription for a similar situation.

[28] Ibuprofen was often referred to as a 'calming' medicine, as it does not 'cure the problem', but calms down bodily pain.

Standardisation of prescriptions as a source of knowledge in self-medication practices

As explained in the introductory part of this paper, both the increased access to healthcare and contact with health professionals that followed independence also resulted in a gradual increase in *lay* familiarity with medical solutions, which tend to be primarily in the form of a prescription. The routinisation and standardisation of medical prescriptions (cf. Lopes, 2009) for the same perceived conditions thus constituted an important source of knowledge that enabled a more autonomous form of self-care. One common example of self-medication with antibiotics, reported by several study participants, was in the management of tonsillitis. As a 30-year-old mother of four children described:

> We almost always went to the hospital in case of tonsillitis. And it was always the same medication, it was always the same thing. And I say, 'No, I'm sorry, the mouth is smelling, he has fever, he doesn't want to eat and everything. Ah, it's tonsillitis, it can only be!' So, it was also from experience. Then I began to realise the medication was that one [clavamox[29]]. Now, staying in line [at the hospital], prick the child [with a needle] and take [the sample] to a laboratory to make the malaria screening… (…) No, [we would go to the hospital] only in case of malaria, if I was missing one of the symptoms that could tell me it was tonsillitis. Otherwise we would medicate at home. (Woman, 30 years)

This highly educated woman described how the combination of symptoms normally led her to certain common diagnoses, such as tonsillitis. The frequency with which such symptoms occurred, both in her and her children, together with the repeat prescriptions of the same medicines and the efficacy of the prescribed treatments, informed her regarding how to manage perceived similar situations herself. As in most cases in this study, however, antibiotics were not immediately the first resource. When a sore throat appeared, she started with what she called a 'home treatment', using honey, ginger and lemon together with paracetamol or an anti-inflammatory drug. When fever came into the picture, she would then introduce clavamox. The same happened when her kids had a cough:

[29] Clavamox contains Amoxicillin and Clavulanic Acid, and was often mentioned by the study participants as prescribed for tonsillitis.

> They leave [for school] early in the morning, catch lots of air draft and so on. But if they spend three days with cough, with home treatment [honey, carrot with sugar and/or onion], without any improvement, I introduce amoxicillin. (…) it depends on the [type of] cough.
>
> (…) They also have asthma, which is very well controlled, they don't even seem asthmatic. So, when it starts, I also give oral salbutamol, to combine with honey, instead of taking antibiotic, and soon it goes away. So, I'm controlling, seeing how they react and all that.

As elaborated in these excerpts, the use of antibiotics depended on how this woman's children reacted to different treatments and how the symptoms evolved. This confidence in self-medication was also supported by her educational background: she considered herself to be very well-informed regarding health issues, since she had studied medicine (although she had not finished her studies) and had access to a diversity of expert sources of information through her personal network, but also through scientific papers that she occasionally consulted online

As with many other interviewees, this woman considered the constraints of going to a healthcare facility for a situation she perceived as common and under her cognitive control; she claimed to know both the symptoms and the medical/pharmaceutical solutions for a variety of situations. Similar to other study participants, while in the case of perceived malaria she would go to a hospital, because she knew a laboratory test would be performed, in the case of cough or tonsillitis she opted for treatment at home since the clinical diagnosis was based on the observation of symptoms—and she knew what symptoms to look for. Hence self-medication, as illustrated in this case, involved using both the same medication from previous prescriptions and the same diagnostic strategy.

As cough and tonsillitis occurred frequently in this woman's household, she also liked to have a stock of these antibiotics at home. As with many other upper middle-class Mozambicans living in Maputo, she frequently drove to neighbouring South Africa to buy many kinds of products, including antibiotics (in this case, clavamox), syrups and other medicines, because they were cheaper there. Pharmaceuticals were thus part of the commodities that some Mozambicans would buy when crossing the border for their (sometimes monthly) grocery shopping.

The importance of the standardisation of medical prescriptions, as a source of individuals' knowledge and confidence in managing perceived similar situations, was

further emphasised by other reported situations where variations in prescriptions occurred. For example, a 29-year-old woman described two episodes of vaginal discharge which had occurred shortly before our first encounter. For each episode, she had been prescribed different treatments, which made her doubtful about what to take if the symptoms would recur.

> The first time was injection plus eight tablets that I had to take all at once. The second time it was not injection, but it was also eight [tablets] plus amoxicillin. Because this happened twice and I got different medicines, [if it happened again] I'd have to go to the doctor. (Woman, 29 years)

The variation in the prescriptions together with the respondent's unfamiliarity with the situation, the uncertainty around the severity of its cause, and the lack of access to a potentially useful and legitimate source of information (other than health professionals) resulted in an expressed reluctance to try to solve the problem in the future without medical assistance.

All of these examples are illustrative of the importance in self-medication practices of being familiar with recurrent situations that tend to receive standard prescriptions. Yet health professionals' recommendations do not always fit with individuals' experiences and conceptions of their (or their relatives') health problems, and the perceived appropriate treatment and care in particular situations. As I explore next, individuals also evaluate their prescriptions and, not uncommonly, act on their evaluations.

Experiential knowledge and the role of other information sources

Although using previous prescriptions as a point of reference for self-medication is a well-known practice, as Lopes (2009) noticed in her study, individuals did not simply reproduce or mimic previous prescribed treatments. Likewise, as multiple conversations with study participants in Maputo have also shown, individuals did not passively follow the original prescriptions without making any considerations about and/or adjustments to them. Prescriptions were assessed based on multiple factors, including individuals' accumulated knowledge and their interactions with prescribers, and were adapted according to other meaningful aspects of their

everyday lives[30]. The articulation of individuals' practical reasoning and their active engagement in such therapeutic processes is illustrated in the example below; a situation where a child was prescribed with six different medicines for her tonsillitis and her father decided to choose which to use from those in the prescription list:

> I wondered [about] the prescription. I went out [of the consultation room] and started reading the medicines… And as I knew, because they always prescribed me the drugs for that, I just told the pharmacist: 'I want this and this medicine, the rest I don't need'. So then I bought those I knew, the others I didn't. Why? Because when she complains about something, I already know what the problem is and what the solution is. Many times, I have that medicine at home. The fridge is full of syrups. I just take out the syrups, so they are not too cold. They take them, and it goes away! So, that's what I did. (…) I bought those two I knew and the others I did not buy. (C: Do you remember which medicines you decided not to buy?) It was amoxicillin in syrup and clavamox. These two are antibiotics. I asked myself 'Two antibiotics? What for? Why not amoxicillin *OR* clavamox?' Then there was something else… I just forgot the names. But I know I did not buy it, I ended up opting for clavamox instead of amoxicillin. (Man, 36 years)

As described above, different factors guided this father's decision to adjust his daughter's medical prescription: the perceived lack of consistency with previous prescriptions (not accompanied by further explanations); his considerations about what is a reasonable number of medicines to prescribe a child (for a common situation); his understandings about antibiotic use (complemented by what he further learnt from the Internet); and his expertise as a father of four children with previous medication intake experience. The example highlights how *lay* knowledge is constructed (see also Baszanger, 1998) and shows how the rationales behind 'responsible' self-medication – or adjustments to medical prescriptions – are dynamic, and how they articulate different sources of information and forms of knowledge. Such reasoning and a 'bricolage-like process' (Horlick-Jones et al., 2007) of learning and making sense (and use) of multiple interpretative resources set up a more critical approach to medical prescriptions; the doctor's prescription in this case did not follow the respondent's perception of 'reasonable' prescription standards.

The role of the Internet as a source of information about antibiotic use seemed to

[30] Including, for example, not having the financial means or not wanting to buy the whole prescription (as also reported in other studies, e.g., Kamat and Nichter, 1998).

have an important complementary place, especially when considering possible risks and associated side effects. One study participant, for example, showed how the Internet served as a confirmatory source following the recommendation he had heard on the television for the need for a cautious use of antibiotics:

> [I decided to search online] by watching on television. Sometimes they talk about antibiotics, that it is not advisable to take them without medical prescription. I started searching, because I knew it was not recommendable. (Man, 42 years)

Antibiotics, in particular amoxicillin, used to be among the group of medicines that this man had consumed more frequently. He had used it every time he had flu symptoms or a cold, after having once been advised at a local pharmacy to take them when in a similar situation. Information about the potential health risks of antibiotic use, however, made him reconsider his previous consumption patterns, which had also included not taking the whole course of antibiotics: "When you feel better, you forget about intake times and then you stop for good". Nevertheless, although perceptions of the potential risks regarding the use of antibiotics varied, risks were always considered at an individual level. While some study participants highlighted the side effects they had felt in their own bodies when using certain antibiotics, others were reluctant to use them without a recommendation by a professional, due to uncertainties regarding what they were actually meant for.

In addition to the uneven access to available information, individuals' socioeconomic and educational background seemed to also play an important role regarding the kind of knowledge that they were able to mobilise, and their confidence in doing so, especially when managing antibiotics. A higher education and socioeconomic background not only enabled access to a wider range of information sources, such as the Internet—access to which was restricted for the majority of my study participants— but also seemed to influence the way in which such information was retrieved, interpreted and used in their own consumption practices. A clear example of this was related to the vocabulary used to identify the medicines themselves. Although there seemed to be a general awareness amongst most interviewees about the circulating recommendations regarding antibiotic use—as a specific medicinal category that should only be used when recommended by a health professional—some of the study participants did not associate antibiotics with the

medicines that they or their family consumed. They knew the generic name of the medicines, but not always the therapeutic category to which they belonged, as shown in the excerpt below:

> C: Do you remember the last time you took an antibiotic?
>
> R: Antibiotic, no.
>
> C: And amoxicillin?
>
> R: Amoxicillin, yes. The two-colour pill, right?
>
> (Woman, 29 years)

This mother of two young children, similar to many study participants, referred to antibiotics as 'capsules', the 'two-colour pill' or the 'yellow and red pill', while others called them by their active ingredient, as they were normally prescribed. As a finding during the exploratory phase of the research, this vocabulary dissonance was taken into consideration when designing the household questionnaires. In 17% of cases, respondents were not able to identify what antibiotics meant when asked about 'the last time they used an antibiotic'. In such cases, examples like those above were given, as a way of making the survey more accurate.

While the uneven articulation of, and access to, different sources of information among the study participants seemed to play a role in terms of how antibiotic use was managed, the terminology used within individuals' life-world vocabularies also shed light on some of the communication and therapeutic engagement gaps between users and providers (both prescribers and dispensers), which will be discussed in the following section.

Communication with prescribers and the role of dispensers in self-medication practices

The relationships between health professionals and patients, widely explored in the literature (e.g., Kamat and Nichter, 1998), certainly play an important role in self-medication practices. Although the thorough analysis of such multifaceted relationships is beyond the scope of this article, it is noteworthy to briefly articulate different accounts from prescribers, dispensers and users in Maputo to highlight a few points. Even though, for most study participants, health professionals (medical

doctors in particular) were seen as the main (potential) source of expert information about medications, in practice, interactions with health professionals were generally seen as too short and authoritarian. Besides the very limited consultation time in public healthcare services, due to the high number of patients and the insufficiencies in human (and technological) resources (similar to in other low-income and middle-income countries [LMICs]—see for example Pearson et al., 2018), many study participants shared the fact that they did not usually pose questions to medical doctors, as this could be perceived as disrespectful. This often resulted in individuals leaving the consultation room with doubts regarding their treatments, broadening the space for other information and reasonings to prevail when considering their prescription. As a 35-year-old man described,

> When you come in [the consultation room] you say: 'I'm feeling pain here'. And he's already writing. Already writing, they are fast! So it brings doubts… 'But is he actually writing what I really feel? In fact, are they working well, these guys?' There's that doubt. (Man, 35 years)

The promptness with which medical doctors made prescriptions was sometimes perceived as a lack of 'good care' and raised doubts about whether the prescriptions were in fact the most appropriate for their situation. This had implications not only regarding how these professionals were perceived by their patients, but also in terms of how individuals later managed the prescriptions they had received. As some explained, is was not rare in such situations for them to not follow the prescription (or to follow only part of it) and to try to find other solutions elsewhere.

While acknowledging the importance of establishing a good relationship and of improving their communication with patients, some of the prescribers I talked with described how challenging this was in the context of public healthcare services. The following excerpt from a medical doctor working in a health centre outside of the city centre illustrates her constraints when managing consultation times:

> In a private system, you have a maximum of 10 patients. Here, no. Here, you have a line of 80 out there [points to the door]. How will you have time to explain all this? Because what happens here is that quality and quantity do not match. You may want to do everything you can, and talk, but time is never enough to talk [about] everything you can because the line is big outside. If you stay longer with a patient, there is another patient outside

> making noise, complaining: 'They are not calling us', 'It is taking too long', 'They went for a walk…'. So, we have to balance things. (Medical doctor, healthcare centre)

The pressure to shorten consultation times led this medical doctor to provide what she considered "essential information" to her patients "whenever possible". Indeed, as she later added, doctors in general did not tend to provide their patients with much explanation – something that went beyond a matter of time and rather depicted a broader medical attitude towards the role of patients in a consultation encounter. However, what some prescribers considered to be 'essential information' was not always in accordance with their patients' perspectives, and the little information about the prescription provided during a medical appointment sometimes went with a lack of information about the diagnosis itself. In other words, patients were many times left without the information they may consider important to discuss, and thus ended up being excluded from their treatment decisions.

In many cases, pharmacy workers played an important role in filling some of the communication gaps between patients and medical doctors. They acted not only as dispensers (e.g., by sometimes helping clients to choose the most important medicines, when they could not afford to buy the whole prescription list), but were also sources of information (e.g., providing their clients with more information, not only about the medicines they were prescribed but also what they were meant for[31]). Pharmacies were, furthermore, accessible points of healthcare, where many individuals would go for perceived minor ailments before consulting a medical doctor. Moreover, despite the low consultation fees and standardised costs for prescription medication in public healthcare facilities, the often-reported lack of medicines in hospital pharmacies pushed patients to buy their medications at a higher rate in private pharmacies. As a result, and combined with other reported constraints examined in this paper and elsewhere (Rodrigues, 2016: 397), some study participants sometimes opted to go directly to a private pharmacy[32]. Therefore, and as is broadly recognised (WHO, 1998), pharmacists and pharmacy workers play an important role in self-medication practices.

According to most of the pharmacy workers I interviewed or talked with,

[31] According to some of the pharmacists interviewed, this information was only shared if the client buying the medicines was also the patient.

[32] As a study conducted by the Maputo City Council (2017) has found, the lack of medicines in public health facilities and time constraints were also the main reasons why some individuals chose to buy medicines at informal markets in Maputo.

amoxicillin was among the most requested medicines without a prescription for flu, tonsillitis, cough, infections and wounds, among others. Some of these pharmacy workers believed that the problem started with doctors prescribing often without running any tests, which led individuals to follow the same logic. Although this resonated with some of the study participants from the community, the first prescription or recommendation of antibiotics did not always come from medical doctors or prescribing nurses, but from staff working in local pharmacies.

Amoxicillin requests without a prescription increased considerably during the cold season. As one pharmacy technician, who had worked for more than 20 years in different pharmacies around Maputo Province, described:

> When cold arrives, the medication is mainly 'amoxicillins'. In the city centre pharmacies, it is a bit difficult [to sell without a prescription]. But in those pharmacies in the suburbs, amoxicillin is being very much 'attacked' without a prescription. The person already knows 'I want amoxicillin' or 'those 2-colour capsules'. If you don't have a force to stop it [and say no to the client]… But if you do have that force, this pharmacy tomorrow will not sell. (Pharmacy technician)

Although antibiotics cannot officially be sold without a prescription, as in many other settings—especially in LMICs (Morgan et al., 2011)—they were available OTC in many private pharmacies. Pharmacy workers talked about how the competition among pharmacies (also found in other studies, e.g., Adome et al., 1996; Kamat and Nichter, 1998) pressured them to keep their clients happy. While some pharmacies, especially in the city centre, seemed to be stricter in following official rules, as the technical director of one private pharmacy explained, there is no rigid control of their sales:

> The Ministry of Health doesn't have a strict control over private pharmacies. So antibiotics end up being sold. Under normal conditions, they should be justified. Each sale should be justified with a prescription. We do register antibiotic sales. But the number of sales exceeds the number of prescriptions. They exceed [by] a lot! They do have that information in the pharmacies of the National Health Service, because there's no dispensing without a prescription. So, this control is possible over there. Here, in the private sector, it's not. (Pharmacy technical director)

While the described lack of regulatory monitoring seemed to give private pharmacies room to make different adjustments to the official rules, the continuous proliferation of private pharmacies around the city increased individuals' options regarding what to consume and where to buy it.

Discussion

This article has analysed self-medication with antibiotics in light of the everyday practical reasoning (cf. Horlick-Jones et al. 2007) of local users in Maputo, situating such practices within their contextual contingencies and wider therapeutic consumption practices and relationships. As the empirical data shows, antibiotics, whether prescribed or not, are part of individuals' everyday lives. They were present in almost half of the households I visited and, according to the household survey, one fifth of the respondents had used antibiotics in the month prior to the survey. Although, in most cases, the antibiotics had reportedly been prescribed by a health professional, in around 26% of cases the most recent antibiotic use was based on individuals' own initiative or following relatives' or neighbours' advice.

Despite the considerable prevalence of self-medication practices, antibiotics and other prescription-only pharmaceuticals were seldom used as a first resort. They were amongst the most commonly used medicines, but most individuals tended to start their therapeutic consumption itineraries with 'home remedies' such as honey, ginger, and lemon, sometimes together with paracetamol or anti-inflammatory medicines. Only when a certain combination of symptoms was identified, and especially when fever was present, were common antibiotics generally introduced. For suspected conditions where diagnoses are generally based on laboratory tests (such as malaria), individuals were more inclined to seek medical advice in healthcare settings. However, for recurring situations where diagnoses are based on a combination of symptoms (such as tonsillitis), and for problems perceived as minor and/or under their cognitive control, individuals tended to avoid the various constraints of healthcare settings and tried to solve the problem themselves.

The influential role of health professionals, both prescribers and dispensers, in self-medication practices in Maputo was clear at different levels. According to the study participants, the most commonly used antibiotics, particularly amoxicillin but also cotrimoxazole and clavamox, were also the most prescribed and recommended; and

the main reported reasons for using prescribed antibiotics, generally described in terms of symptoms— such as cough, fever, wounds and specific pains—were consistent with the main conditions self-treated with antibiotics. Indeed, as many studies have long shown (e.g., Haak, 1988; Hardon, 1991; Nichter and Vuckovic, 1994), previous medical recommendations are not only a point of reference for self-medication, but are also often used as a way of legitimising such practices. As illustrated in Maputo, repeated medical prescriptions and recommendations for common conditions increased individuals' familiarity with certain pharmaceutical solutions, as well as with the process of identifying the health problem. Yet although they constitute a main reference for self-medication practices, as this and other studies (e.g., Lopes, 2009) have shown, individuals do not simply follow or reproduce previous medical recommendations. Medical prescriptions are evaluated according to an 'interpretative framework' (Schutz, 1972), based on individuals' life-worlds and experiential knowledge, which articulates information collected from a variety of sources, including from health professionals, their personal and socially shared experiences with the medication (Lopes, 2009; Rodrigues, 2016; Fainzang, 2017), experiences with prescribers and dispensers (Kamat and Nichter, 1998), and interpretations of perceived symptoms and medical solutions. Prescriptions are, moreover, adapted according to individuals' financial conditions, as well as to other meaningful aspects of their everyday lives.

The constructed nature of individuals' knowledge, which differently incorporates and mobilises appropriations of technical expertise (Giddens, 1990), results in modalities of medicine use that do not always conform to health professionals' recommendations. In this context, socioeconomic and educational backgrounds also played a role in individuals' perceived autonomy regarding the management of certain medicines, with highly educated individuals displaying more confidence in self-medicating with antibiotics than other interviewees. They tended to have access to a wider variety of information sources and the perceived literacy necessary to understand and apply technical information to both prescribed and non-prescribed medication use. Most study participants, however, stressed the overall lack of information about medications—including that provided by prescribers, as therapeutic encounters tended to be short, vertical and prescriptive, often preventing individuals from raising questions. This reflects a wider problem of a lack of good communication between prescribing health professionals and patients, something that is widely acknowledged in the literature (see e.g., Gregory et al., 2011).

The sociocultural distancing between medical doctors and patients, especially when the latter were from a lower socio-educational background, was also reflected in the medication vocabulary used. Many individuals in Maputo did not associate some of the medicines they used, such as amoxicillin, with antibiotics. Improving communication between prescribers and users, and adjusting health campaign messages to use more contextually-significant vocabulary, could help improve awareness. However, terminology is only one example of much deeper and structural gaps that shape communication between prescribers and users. The very idea that individuals need to be educated in order to improve both the 'rational' use of antibiotics and prescription compliance results from a normative and medical-centred approach which neglects individuals' engagement in their own healthcare and the 'social and economic realities' (Nichter and Vuckovic, 1994) of medicine prescription and use. As previously discussed, compliance tends to emphasise the legitimacy of prescribers' actions over those of patients (Stevenson et al., 2002). The assumption that individuals should recognise such legitimacy, and therefore follow whatever is prescribed for them (or their children), regards individuals as "passive and obedient recipients of medical instructions" (Stimson, 1974 cited in Conrad, 1985), and neglects other legitimate forms of reasoning which could lead to different actions. It also assumes that medical doctors' prescriptions are always the most 'rational' and legitimate, disregarding issues around over-prescribing, and other prescribing errors, which are repeatedly highlighted in the literature on antibiotics and AMR (e.g., Llor and Bjerrum, 2014), as well as the context of the prescription itself (see also Pearson et al., 2018). Moreover, as Morgan et al. (2011: 697) found in their systematic review of non-prescription antimicrobial use worldwide, "[c]lear evidence that antimicrobials obtained without prescription are used less appropriately than prescription antimicrobials does not exist".

Prescribing is a social exchange (Hall, 1980) and "cannot be easily disengaged from its larger social and cultural contexts" (Pellegrino, 1976). Its legitimacy is contextually assessed, by both patients and prescribers, based on social and medical factors (Stevenson et al., 2002) and thus the act of prescribing at the end of the therapeutic encounter often goes beyond strictly medical purposes. Hence, the repeated argument that the over-prescription of antibiotics is mainly driven by 'patient demand' needs to be further deconstructed and analysed in concrete contextual circumstances. As Britten (2008) has pointed out, doctors' perceptions of patients' expectations can have a greater influence on prescription patterns than patients' actual expectations. As

empirical examples from Maputo have illustrated, when individuals are not able to solve health-related problems through self-care (or community help) and they decide to navigate the challenges inherent to any public healthcare service in a resource-poor setting, they do expect medical solutions. However, if these solutions—often materialised in prescriptions—are not accompanied by other equally valued elements such as time, care and good communication, important in the construction of a trusting relationship (see Rodrigues, 2016: 397), then individuals may leave the consultation room with doubts. Doubts that will, eventually, influence how (if at all) they will use the prescribed solutions. Therefore, prescriptions need to be discussed between prescribers and users to ensure that the most adequate solution to individuals' life-worlds (Schutz, 1972) and to their socioeconomic conditions is found (see also Zola, 1972).

Finally, as is widely recognised (WHO, 1998), pharmacy workers play an important role in self-medication practices, including in the management of prescribed medicines. They act not only as dispensers, but as sources of information and points of healthcare (see also Ferguson, 1981; Logan, 1988; Kamat and Nichter, 1998). Particularly in contexts where public health services are overloaded and often lack human and technological/ material resources, such as Maputo and other LMICs, going directly to a pharmacy is often seen as the most cost-effective solution. The ongoing and growing competition in the pharmacy business in 'loosely regulated' contexts (Hardon and Sanabria, 2017), however, results in pharmacy workers feeling pressured to satisfy their clients, which may sometimes conflict with their role as health professionals. Hence, the involvement of pharmacy workers in programmes aimed at improving antibiotic use is important (Saradamma et al., 2000). Yet, while most recommendations to strengthen restrictions on self-medication with antibiotics emphasise the lack of policy enforcement to prohibit OTC sales (e.g., Mitema, 2010; Llor and Bjerrum, 2014), cautions on the balance between restriction and access and the need to consider geographical inequalities have also been raised (e.g., Bloom et al., 2015; Lambert, 2016; Laxminarayan et al., 2016; Khan et al., 2018). Indeed, regulatory measures need to be adjusted to local realities. In resource-limited settings, pharmacies may be the most reliable providers of both general healthcare and life-saving medicines. Moreover, the availability of antibiotics through illegal or informal channels may represent an even bigger challenge. The circulation of unsafe, substandard and/or counterfeit antimicrobials, often dispensed by untrained and uncredited sellers, is a challenge in many countries in the African region and, it has

been argued, may accelerate and spread AMR (Ndihokubwayo et al., 2013). These realities need to be considered in regulatory measures and interventions.

Final remarks

Studies from different parts of the world have shown how self-medication is "the most common medical action" (van der Geest et al. 1996: 154) and how, in some settings, antibiotics are amongst the most commonly used therapeutic category. Likewise, in Maputo, I found that antibiotics were part of the 'home pharmacies' in almost half of the households I visited. By looking at self-medication with antibiotics beyond (non-)prescription use, and by situating individuals' decisions and practical reasoning within their socioeconomic and therapeutic landscapes in Maputo, this study sought to shed light on the situated rationales of certain consumption practices that do not always follow biomedical recommendations of 'rational/appropriate use'. Looking at some of the relational and structural factors behind such rationales helps us to deconstruct and further problematise the various legitimate meanings of responsible use. Individuals are actively engaged in therapeutic processes, whether regarding their own or those of their family and community. While this is in accordance with a predominant *healthism* ideology (Crawford, 1980) that emphasises self-reliance and individual responsibility for one's own health (Declaration of Alma Ata, 1978), it contrasts with global public health efforts to control antibiotic use[33]. Yet, as part of individuals' home technologies, antibiotics are embedded in self-care practices. It is therefore important to examine the social, cultural, political and economic contingencies that may influence different antibiotic needs and modalities of use, in "one context at a time" (Lambert, 2016), and to engage with all of the different local actors to improve antibiotic use. In such an approach, individuals' rationales should not be seen as part of the problem, but should rather be incorporated into the solution. While this study analysed self-medication practices in Mozambique's capital city, where access to public healthcare services and pharmacies is significantly higher than in the rest of the country, further research is needed to understand self-medication practices and needs in different national settings.

[33] https://www.who.int/mediacentre/commentaries/stop-antibiotic-resistance/en/ (last consulted in May 2019).

'Home pharmacy', Maputo (2016)
Photograph taken by Carla Rodrigues.

Chapter 4

Communicative trust in therapeutic encounters: users' experiences in public healthcare facilities and community pharmacies [34]

Abstract

Interactions between healthcare users and providers are an essential but often problematic element in therapeutic processes. In many settings worldwide, there has been a general recognition of the importance of adopting care approaches that understand patients as active agents, moving away from traditional paternalistic forms of interaction. Research shows that improving the quality of communication in therapeutic encounters fosters mutual understanding and cooperation in healthcare processes, helping to create the grounding conditions for building trusting relationships. But what are the communicative mechanisms through which trust in healthcare providers is cultivated? Going beyond the traditional 'doctor-patient' dyad analysis, and using data from a mixed-method study on medicine use in Maputo, Mozambique, this paper explores healthcare users' experiences and interpretations of their interactions with public healthcare professionals (medical doctors and prescribing nurses) and community pharmacy workers (pharmacists, technicians and other attendants). The analysis evolves around various communicative and relational aspects, emphasised by users as meaningful and underpinning different qualities of care, competence, integrity and trustworthiness. These attributes were assessed based on a combination of verbal conversation and information exchange, together with the use of other (non-verbal) situationally valued artefacts such as biomedical tools and communicative rituals performed by providers. This study shows that despite healthcare providers' different attributes of competence and authority, it is mainly their communicative performances during interactions that influence whether (symbolic) trust has the space to evolve or crystallise. Moreover, while performing certain rituals may be an effective form of communication, the lack of other (verbal and non-verbal) communicative elements during the interaction may compromise patient trust in what is being prescribed or advised. Efforts to improve the quality and responsiveness of healthcare services centred around citizens' needs should take users' perspectives into account and pay particular attention to these communicative and relational dimensions.

[34] Originally published as: Rodrigues, C.F. (2021), Communicative trust in therapeutic encounters: users' experiences in public healthcare facilities and community pharmacies in Maputo, Mozambique. *Social Science & Medicine*, 291, 114512.

Introduction

Interactions between healthcare users and providers have long been recognised as a fundamental, yet often problematic, element in therapeutic processes. As a classic theme in medical sociology and anthropology, discussions around communication and on the often-asymmetrical interactions (and agendas) during therapeutic encounters are well known since early academic literature in the field (e.g., Freidson, 1970; Zborowski, 1960; Zola, 1981). In the last decades, the relevance of understanding trust in healthcare relationships has captured increasing scholarly attention, especially in 'Global North' (e.g., Mechanic, 1996; Hall et al., 2001; Brown, 2009), but also in 'Global South'. In these latter settings, attention to socioeconomic structures, to articulations between (in)formal sectors and to the implications of trust in health-seeking practices has been more salient (Birungi, 1998; Gilson, 2003; Russel, 2005; Topp and Chipukuma, 2015; Rodrigues, 2016; Ackatia-Armah et al., 2016; Hampshire et al., 2017; Hamill et al., 2019).

Despite the vast literature on communication in therapeutic contexts and growing attention to the importance of trust in such interactions, the focus on the 'doctor-patient' dyad is still predominant. Yet, the changing doctor-patient relationship – and the declining dominance of medical doctors – has brought to the fore the importance of looking at other key relationships in the healthcare process (Bury, 1997; see also Pilnick et al. (2009) for an overview of conversation analytic studies in this field). Particularly in contexts where access to public health services is more limited and the doctor-patient ratio is low, attention to the role of other providers, such as community health workers (e.g. Ackatia-Armah et al., 2016), or community pharmacists (e.g. Gilbert, 1998), and their relationships with local populations becomes even more relevant.

While medical doctors are central institutional figures in therapeutic contexts, the growing reliance on medicines as privileged solutions in modern contexts of ill-health management, and associated health commodification processes (Nichter, 1989), have increased the relevance of pharmacies in individuals' therapeutic itineraries. With the proliferation of pharmacies and pharmacists' expanding roles in the community (e.g., Gilbert, 1998; Weiss and Sutton, 2009; Yariv, 2015), these have become not only important points of access to pharmaceutical products, but increasingly a 'gateway to care' (FIP, 2017). In many settings, such as Maputo, Mozambique, where the current study took place, community pharmacies are often sought as primary healthcare

consultation points, and sources of information, advice and treatment (Ferguson, 1981; Kamat and Nichter, 1998; Logan, 1988; Patterson, 2015; Mayora et al., 2018; Rodrigues, 2020), especially for minor ailments. As researchers have noted, the relative social proximity of pharmacy workers often contrasts with the highly asymmetrical relationships within public healthcare settings (Sánchez, 2016). Thus, while going directly to a pharmacy is often a pragmatic way of avoiding or coping with overloaded, ill-equipped and/or geographically remote public health services, especially in low- and middle-income countries (LMICs), such a preference also tends to incorporate a social and interpersonal relational dimension which, as this study will show, is important when seeking healthcare.

Using a 'communicative trust' analytical approach (Brown, 2008), this paper aims to add to this growing literature by looking at particular communicative elements emphasised by healthcare users in Maputo as meaningful and important to them when interacting with public healthcare professionals (medical doctors and prescribing nurses) and community pharmacy workers (pharmacists, technicians and other attendants). While attending to the dynamics involved in healthcare-seeking practices, especially when managing common symptoms, this analysis will explore how individuals relate with these providers; how they perceive their role and competencies, and what expectations they have on their performance in therapeutic encounters.

Significance of communicative trust in healthcare interactions

Trust is an essential mediator in therapeutic processes (Calnan and Rowe, 2008). Besides its intrinsic significance in defining the meaning and value of healthcare user-provider relationships (Hall et al., 2001), trust is essential for enhancing cooperation and mutual understanding (Mechanic, 1998), in helping the acceptance of new ideas and changing practices (Ackatia-Armah et al., 2016), and in influencing patients' treatment-seeking behaviours (Russel, 2005). As a process involving both cognitive and affective dimensions (Lewis and Weigert, 1985), trust is often associated with expectations regarding others' intentions and abilities to act in the interest of the trust giver (Misztal, 1996). In the context of healthcare interactions, it regards "expectations by the public that health care providers will demonstrate knowledge, skill and competence; [and] that they will behave as true agents (that is, in the patient's best interest) and with beneficence, fairness and integrity" (Davies, 1999:193). How such

expectations are shaped, and the interpretation of how they may materialise in practice, need to be understood within the context in which these therapeutic interpersonal encounters take place (Calnan and Rowe, 2008:7).

Interpersonal trust in healthcare providers is developed within a complexly entangled web of other relations and interactions (Gilson, 2003; Meyer et al., 2008; Rodrigues, 2016), which include the medical system that frames their practice and the healthcare organisation where the practice takes place. Yet, as discussed elsewhere (Rodrigues, 2016), direct interactions – or experiences mediated by trusted members of individuals' close social networks – are fundamental in developing trust relationships, as they result in more concrete forms of experiential knowledge (Brown, 2009; Brown and Calnan, 2012).

As an inherently reflexive and relational process (Möllering, 2001; Gilson, 2003; Brown, 2008), which builds on and changes through daily interactions and experiences (Rodrigues, 2016: 402), trust is deeply entangled with communication processes – where trust is both an *input* and an *output* of such communication (Thiede, 2005: 1460). It is, however, through the process of communicative interaction that trust may develop (Thiede, 2005; Brown, 2009). Thus, effective communication remains a central feature in therapeutic interactions (Mechanic 1996, 1998) and is essential to legitimate providers' authority as knowledgeable, competent, caring and trustworthy agents (Brown, 2008).

Efforts to improve user-provider communication have become central to patient- or person-centred care approaches. Understanding patients as active agents in their own treatment, these approaches stress the need to improve providers' communicative and active listening skills, and to go beyond patients' physical complaints by encouraging them to express their concerns, feelings and expectations regarding both their problem and its therapy (Stimson, 1974; Stewart et al., 1995; Stevenson et al., 2000). While this may not necessarily involve equal participation in decision making in clinical contexts (which may also not always be what patients look for when they consult a medical doctor (see e.g. Lupton, 1997)), it does, however, imply an effort to find a common ground with patients so that they are involved and feel that their concerns are being addressed. Such an orientation towards cooperation and mutual understanding reflects a form of 'communicative action' (Habermas, 1987; Scambler and Britten, 2001), based on a two-way interactive process, which creates the underlying conditions for building trust (Brown, 2008).

Many of these principles are, however, frequently absent in therapeutic encounters (Stevenson et al., 2000). This has been particularly observed in resource-limited settings, where unresponsive care and providers' poor (and sometimes abusive) attitudes towards patients have been reported (e.g. Topp and Chipukuma, 2015; Camara et al., 2020). Moreover, improving provider-patient communication is often sought as a way to improve patients' adherence to prescription treatments (Donovan and Blake, 1992:507). Such an instrumental use of communication distorts the underlying principles of what communicative and patient-centred actions entail. Such distinctive styles resonate with a concordance versus compliance approach to practice (see Stevenson and Scambler, 2005). While concordance presupposes that both the patients' and professionals' perspectives are acknowledged and negotiated, in a compliance approach communication is tailored to mainly reflect professionals' views and goals.

Communication can take various forms and includes both verbal and non-verbal elements. While oral or written information exchange is essential, other communicative elements such as voice tone, facial expressions, body language and even silence can sometimes be more significant or meaningful. Equally or perhaps even more important in a therapeutic relationship, is the contextual *metacommunication* and the share of *tacit knowledge* through what Nichter and Nordstrom (1989:379) have framed as 'empathy': "a sympathetic understanding of [patients'] illness experience and state of well being in the context of their lifeworld". Such empathy can only be achieved through a communicative approach that seeks to contextualise and socially situate individuals' experiences, concerns and needs.

Ritualised forms of communication also have a special place in medical practices and especially in therapeutic encounters (e.g. Turner, 1969; Helman, 1984; Elks, 1996), where healthcare providers and other involved social actors, are expected to perform in certain meaningful ways. Physical examination (Lupton, 1997), the use of medical technologies and diagnostic devices (Rosenberg, 2002), and the act of prescribing at the end of the consultation (Whyte et al., 2002), are well known examples of communicative rituals in therapeutic encounters. As the empirical examples in this paper will show, performing such rituals, particularly in specific meaningful situations, is also a way of communicating care and thus enabling more trustful relationships, especially when combined with other communicative elements.

Such an understanding of trust, founded upon communicative action, is what

Brown (2008:351) has designated as communicative trust, which helps highlight the communicative mechanisms through which users come to trust in healthcare providers. And so, efforts to improve patient-centred approaches need to appreciate how the articulation of these interactive elements take place in therapeutic encounters.

In Mozambique, problems around user-provider interactions in the public health sector have been recognised and efforts are being made to improve the quality and humanisation of healthcare services (MISAU, 2016). However, as further developed in the following section, various challenges remain. This paper aims to contribute to discussions around ways to improve healthcare user-providers relationships, by looking at how interpretations around communicative trust in therapeutic encounters are shaped, and the effects of these relational experiences in healthcare seeking considerations.

Research setting and design

Setting

This study was conducted in Maputo, the capital of Mozambique. After the initial successful implementation of a primary health care strategy following the country's independence in 1975, and improvements in the population's access to public healthcare and essential medicines (Barker, 1983), the sector was badly affected by a weakening economy, a lack of material and human resources and a civil war (DHS, 2013) which lasted until 1992. Despite significant improvements in service utilisation and coverage in the last decades, Mozambique's health sector still faces numerous challenges, including limited human resources, equipment, medicines and uneven access to quality health services across the country (PESS, 2014–2019).

Insufficiencies in healthcare human resources (HHR) represent one of the main challenges to improving quality and equity in service provision (MISAU, 2016). Despite significant increases in HHR in the last 15 years, Mozambique is still one of the countries with the lowest ratio of health technicians per inhabitant (MISAU, 2016). Maputo city, although equipped with fewer healthcare facilities per inhabitant when compared to other provinces, has the highest ratio of health technicians/population, with a total of 3278 providers in 2019 – most of them health technicians, followed by nurses and medical doctors (MISAU, 2020).

Besides various challenges regarding HHR' availability, geographic accessibility and training quality, also problematic is public healthcare providers' acceptability among the population (MISAU, 2016), particularly in terms of how they interact with patients. Lack of courtesy from health staff (CEP and N'weti, 2016) and examples of disrespectful and abusive situations in clinical encounters have also been reported, mostly in sexual and reproductive health care or maternal care encounters (MISAU, 2016). The recognition of these problems led to the creation of a national programme to improve the quality and humanisation of healthcare services, through improved training curricula for healthcare providers in professional ethics and deontology, and complementary mechanisms to reinforce respectful treatment, among other measures (MISAU, 2016). One of the dimensions of service quality is 'patient-centred care and humanisation', defined as "care that respects and is sensitive to individual patient preferences" (MISAU, 2016:51).

As argued in CEP and N'weti 2016, hearing healthcare users' voices is as important as training more healthcare technicians or reducing provider/population ratios. Users' perspectives would inform policy formulation and evaluation of interventions in line with users' expectations and needs. Making services more responsive to citizens might also "generate conditions to improve the image and confidence of citizens over the health services." (CEP and N'weti, 2016). Such perspective is much in line with the aims of this paper, where the voices of citizens and their trust in health services are analysed.

The introduction of neoliberal policies in the 1980s and the 1998 Medicines Law (*Lei do Medicamento* (nr. 4/98)) has expanded the private pharmaceutical sector in the country. In 2012 there were a total of 293 pharmacies in the country (a 120% increase over 10 years), 60% of which were concentrated in Maputo (MISAU, 2012), and the numbers continue to grow (SARA, 2018). This proliferation of pharmacies, especially in the capital city, has enabled wider access to pharmaceutical products, and also to the counselling services of pharmacy workers. Most of those working at private pharmacies in Mozambique are pharmacy technicians (72%), followed by pharmacy agents (27%), servants (9%) and only 2% are pharmacists (SARA, 2018). The low number of highly qualified pharmacists seems to sometimes be balanced by high numbers of technicians who often have many years of experience of contact with the population.

Data and methods

The analysis draws on qualitative and quantitative data, collected during a total of 10 months of fieldwork divided into two phases. As part of a broader study on medicines use in Maputo city, the first phase of data collection (2013–2014) included observations of client-provider interactions in pharmacies in five different neighbourhoods, exploratory interviews and informal conversations with practitioners from different health-related organisations, and seven focus-group discussions (FGDs, n 42) with individuals from the community. These qualitative and more exploratory data informed the design of a household survey, conducted in 15 randomly selected neighbourhoods in five municipal districts in Maputo city (n=265). The respondents were aged between 18 and 87 (mean 34), nearly two-thirds (68.7%) were female and most were employed (37.7%) and/or students (27.9%). The questionnaires were administered by undergraduates studying sociology at the Eduardo Mondlane University (UEM), who were trained, supervised and accompanied to the neighborhoods by the author.

The second phase of fieldwork (2016) included the collection of more in-depth qualitative data, through repeated follow-up interviews (2–3 encounters) with 17 healthcare users. These were selected from the list of participants in the survey and in the FGDs who had formally agreed to be individually interviewed. They were selected based on their sociodemographic characteristics and medicine use practices, with an attempted balance in terms of sex (nine men and eight women), age (21–59), school level (from 10th [secondary] grade to university studies) and from 10 different neighbourhoods. The aims of these interviews were manifold, including to contextualise and further explore the practical reasoning behind and/or experiences with medicine use (prescribed or obtained over-the-counter), different therapeutic trajectories (following a similar logic used in a previous study, see Rodrigues, 2010; Lopes et al., 2012), therapeutic interactions with different healthcare providers, access to and use of different sources of information regarding different health conditions, prescribed treatments or (other) available therapeutic options. The interviews were conducted in Portuguese. Additionally, 10 key informants (health providers and a personal trainer) were interviewed. Apart from the face-to-face application of the questionnaires, all the remaining data was collected by the author.

The quantitative data were analysed using IBM SPSS Statistics 20 and allowed the identification of the main consumption and therapeutic itinerary patterns considered

in this paper. While drawing from data across all the different methods described above, the quotes used in this paper result exclusively from the in-depth interviews. The interviews were recorded and transcribed, and the quotes used were translated by the author, taking into consideration their contextual meaning. A thematic content analysis (Green and Thorogood, 2014) was used, allowing the identification of the main analytical dimensions. Different themes were generated through an iterative process and a phenomenological analytical approach (Schutz, 1970) was used to interpret the data, privileging individuals' understandings of their everyday experiences. The research project was hosted in Maputo by the Department of Sociology (through the Health and Society Research Group), Faculty of Arts and Social Sciences, UEM. It received formal ethical approval from the Institutional Committee on Bioethics for Health at the Faculty of Medicine and Maputo Central Hospital (CIBS_FM&HCM), and the required administrative permissions. Written informed consent was obtained from all participants in the FGDs, household survey and individual interviews. All other informants gave oral consent.

Findings

Discussions with users about their interactions with healthcare providers evolved around various communicative and relational aspects, underlining different qualities of care, competence and trustworthiness. Users assessed these attributes based on a combination of the conversational and information exchange dimensions of the interaction, together with the use of other situationally valued artefacts and communicative rituals performed by providers. The analysis starts with a brief overview of public healthcare facilities' and community pharmacies' role in individuals' therapeutic trajectories, especially when managing common symptoms. Expectations about the services delivered in each of these healthcare 'access points' (Giddens, 1990) are then articulated with discussions about participant's concrete experiences in interactions with provider.

Therapeutic trajectories and pragmatism in everyday decisions

To explore the most common therapeutic trajectories when managing common symptoms such as fever, cough and diarrhoea (identified during the exploratory stage

of this research), study participants were asked to recall the steps taken the last time these symptoms occurred. This strategy was used in both the household survey and the in-depth interviews (though other situations were further explored during the interviews).

According to the household survey, the percentage of respondents reporting the occurrence of these symptoms in the previous month confirmed their high prevalence in the community: fever (36%), cough (36%) and diarrhoea (20%). With some variations, around one third or more of the respondents tried to first treat at home each of the three conditions (32.1%, 40.2%, 33.8%, respectively), which in many cases included the use of home remedies, traditional medicines or pharmaceuticals they had at home (see Rodrigues, 2020). For most respondents who decided to seek healthcare outside home and beyond their family and social networks, public health facilities (healthcare centres or hospitals) appeared as the first option in 41.8% of fever, 18.3% of cough and 16.9% of diarrhoea cases, followed by community pharmacies in 8.0%, 14.5% and 6.5% of the cases, respectively.

Although pharmacies do not seem statistically expressive as a first option in these trajectories, the in-depth qualitative data revealed that they have a more prominent role in individuals' therapeutic practices (whether before, after or in place of going to a public healthcare facility) than the survey allows to capture. While public healthcare facilities were generally considered as the most 'appropriate' place to go when feeling ill, community pharmacies were often sought as pragmatic and quicker solutions for managing a variety of conditions, especially in situations perceived as non-severe:

> The problem of the hospital is the waiting time. It's what often makes us give up and try to go to the pharmacy. When we are badly ill, is when we gain patience to wait for the doctor. (male, 42)

In some cases, the circumstantial financial situation also played a role:

> Those days when I don't have the time, and know that in the hospital I will not get the medicines, I prefer to go to the pharmacy, if I have money at that moment. But if I don't have the money, I go to the hospital. (female, 29)

The various constraints of going to a hospital or health centre, which included long

waiting times, the short consultation time, and the recurrent lack of medicines, often made community pharmacies a more convenient and pragmatic option. In persistent or perceived severe situations, however, healthcare centres or hospitals were often referred to as the place to go.

Imperative of technology? The importance of biomedical techniques in therapeutic processes

The availability of a vast array of diagnostic tools in public healthcare facilities was often mentioned as an attractive feature, especially when a less 'superficial' condition required a more 'in-depth' examination. The appreciation of medical technology in such situations was present in most narratives:

> The doctor may have more options; he has more alternatives. You can go through that machine that you get in there to see what's happening. Usually when we go to a pharmacist it's because it's a superficial thing. You have a persistent headache, just to hold it for a while. So, the advantage with a doctor is that he can perform an in-depth exam, while the pharmacist only gives a hunch, perhaps to mitigate. (male, 39)
>
> I know that in the hospital any little thing has a solution. If it's not one thing, they'll perform an X-ray to see what else I have more, they'll analyse me, they'll know what I really have. Something they'll do to me. Only then they'll give me pills. (female, 57)

As 'tokens' (Giddens, 1990) of modern medicine, these 'biomedical techniques' – including both the artefacts and related procedures to diagnose and treat (Hadolt et al., 2012) – were seen as important instruments for a more accurate diagnosis and, in some cases, for managing uncertainty. Performing such examinations was often seen as a form of care (see also Whyte, 2004) and the central role in articulating the diagnosis process was placed on the medical doctor. They were the gatekeepers to such technologies and the ones who held the ability to interpret their results. Through different biomedical techniques, doctors were given the power to 'see things' that other providers did not, giving them more 'credibility':

> I think the doctor is a bit more credible [than the pharmacist]. First, because it is him who detects the type of problem that the person has. (…) Maybe

> because of habit, when we arrive at the hospital, the doctor gives a paper to go to the laboratory. You go to the laboratory, make the analyses, return and deliver them to him. He already has a notion. Hence, that whole process creates a greater credibility in the doctor. Because he is the one who sees things, he is the one who has to investigate, then you bring the answer, he has the conclusion and the solution. So, I think there's credibility in the doctor for all of this. (male, 39)

As illustrated in this quote, the ritualising procedures involved in 'investigating' the problem(s), often mediated by the use of laboratorial tests or clinical exams, gave healthcare providers credibility, and were a central feature in the process of trust in their solutions (see also Rodrigues, 2016:397–8). The reference to '*maybe because of habit'* suggests a routinised practice in therapeutic encounters, which helps shape patients' expectations from these interactions.

Expectations around certain technical procedures were particularly relevant in specific situations, especially when these represented a perceived risk. As the household survey showed, among the three common symptoms indicated above, people tended to go directly to the hospital more often in case of fever. During the interviews, fever was also often mentioned as a concern that needed further analysis. Despite various interpretations of fever, its combination with certain symptoms was frequently described as a concern which needed a laboratorial test:

> If she's not breathing very well, and she's coughing, I already know that my daughter has asthma. So, I already have the asthma drug at home, I can give it to her. There's a pharmacy right next door, I can buy it. But if she also has fever, I don't know why she has fever …. This I have to find out with analysis. (female, 25)

One of the main concerns was the possibility of having malaria:

> I think it's fear. People know that with malaria they will die. It's very present, you have examples, you have the neighbour who's gone … it's present, it's concrete. It is concrete. (male, 36)

The 'concreteness' of malaria burdens and risk in individuals' everyday lives was very present in the community, and the sociocultural contingency of such risk perception

(Douglas and Wildavsky, 1982) is highly embedded in these people's lived experiences (Schutz, 1967). As a result, the possibility of having malaria was often mentioned as a reason for going to the hospital. In some cases, individuals would recognise the symptoms due to previous malaria events. But the advice to go to a public healthcare facility for the test was also sometimes received in community pharmacies.

As a leading cause of death in Mozambique (PESS, 2014–2019:33), but also a problem in which the government and international aid agencies have greatly invested in terms of prevention and management, the awareness of the need to test and treat malaria promptly was present in all the study participants' accounts. According to the Government's case management guidelines, febrile patients or malaria suspects should be tested, and antimalarials cannot be prescribed without a positive test result (Candrinho et al., 2019; Salomão et al., 2015). This has moved expectations away from access to antimalarials alone, towards the need for a laboratorial or rapid diagnostic test (RDT) - the *technological means* to get proper treatment. As one participant said "Fever always results in malaria." Thus, when individuals fear they (or their children) might have malaria, the non-prescription of a test by the healthcare provider often conflicts with their expectations:

> I don't like it [when they don't do analysis]. They give me the [medication] prescription, but I'm not happy. I like to do analysis. Because … I explain: 'I have a headache'. And the doctor prescribes me a medicine. [The pain] continues and I'm not well. I'm feeling malaria, imagine it's malaria pain! It's happened to me once. I went back with the prescription and explained that I wasn't well. They did the analysis and it was malaria! See? So, they gave me malaria medicine. Three days later I was fine. (female, 29)

As a mandatory step to get access to malaria treatment, the use of tests became not only an expectation but also a 'moral obligation' (Koenig, 1988):

> When you find a good person, they don't deny [prescribing the tests]. When they aren't a good person, they deny: 'you have the prescription to buy the medicines!'. It depends on the nurses.

As the quote above suggests, the willingness to prescribe tests is not only perceived to be a form of communicating good care, but also reveals the providers' integrity as

a health agent who has their patients' best interests in mind. The contextually situated meaning ascribed to these tests helps to explain how such technologies became one of the main reasons for going to the hospital in the presence of certain symptoms, such as fever; and is illustrative of how expectations and notions of good care shape individuals' interpretations of their therapeutic interactions with healthcare providers.

Prescribing as an (in)effective form of communicating care

With medicines occupying an increasingly central place in modern contexts of ill-health management, the act of prescribing as a 'closing ritual' at the end of a consultation constitutes another (often) effective form of communication (Whyte et al., 2002). It shows that the patients' concerns are being addressed and that a solution is being provided, even when uncertainty about the diagnosis prevails (Comaroff, 1976; Pellegrino, 1976). Yet, while in some situations a prescription alone may fulfil both providers' and patients' goals and expectations (cf. Sachs, 1989), this is not always the case. As well as expressing criticism of the non-performance of medical exams, most study participants also described their encounters with public health prescribers as too short and highly prescriptive, leaving '*no room to create any relationship*' between them:

> The diagnosis is made very fast because I think they have many people to look at … so there is no room to create any relationship with them. It's a very technical thing, really. So, it doesn't feel like going to the hospital. (male, 34)
>
> What I don't like is to be there, talking to a doctor and, before I've finished talking, he already wrote the prescription. When I haven't finished explaining what exactly is happening! So, that's one of the things that made me hate going to the hospital. Because they give me the same thing they give to everybody. (female, 25)

The examples above are illustrative of what many participants described as typical interactions with medical doctors or prescribing nurses, mainly characterised by a disruptive form of communication, and not giving space for individuals to fully express their understandings and concerns. The promptness with which providers prescribed medicines raised doubts about their competence and by implication their

prescribed solution. As a 35 years-old man wondered: "*is he actually writing what I really feel?*" Such impersonal and unbalanced encounters were pointed out as reasons for their reluctance to use public services.

Most study participants also discussed how they rarely received what they considered to be enough information about their health conditions and prescriptions, which prevented them from getting actively involved in the treatment decision – at least, inside the consultation room. In some cases, prescriptions were still followed due to the recognition of doctors' authority, expressed in the following quote by reference to the '*wearing a white coat*', a well-known 'ritual symbol' (Turner, 1969) associated with 'science', 'expertise' and 'credibility' when used in a clinical context (Helman, 1990):

> What can we do? It was the doctor who said it, he's wearing a white coat (laughs). I have to respect the white coat. (female, 25)

Furthermore, most study participants said that even in situations of doubt, or disagreement with the therapy, they did not feel comfortable asking questions, as this could be considered disrespectful and questioning the providers' authority. In some cases, this resulted in patients dismissing their prescription, once outside the consultation room. For example, one participant with malaria described how a first prescribed dose of chloroquine did not seem to be working and was causing an allergic reaction. He went back one week later hoping to receive a different medication. Despite explaining the side-effects, along with the persistent malaria symptoms, he received the same prescription. He ended up self-medicating. When asked why he had not told the doctor that he was unwilling to take the same medication again, he replied that he did not have the 'courage' to ask for a different prescription:

> At that time, I don't know if it was negligence or what they had studied, but people feared facing health agents … And to challenge someone or question them orally, I can't imagine the answer that person could give you. So, that's what kept me from approaching. It's not just me, it's general. … They are working for the population, they work with people, they needed to have affection for the people, but [the reality] is different. … So, we avoid these clashes with them. In fact, I didn't get the courage to ask. (male, 35)

By reflecting on healthcare providers' lack of approachability, this participant stressed how he expected health agents to show more affection. This goes beyond expectations on the technical skills of providers, to include more caring and affective competencies at a personal level. It also describes a lack of 'empathy' (Nichter and Nordstrom, 1989), reinforcing the social distancing between these social actors, reproducing a more historically rooted vertical interaction (cf. Hanlon, 1984 [1984]:65), and undermining the process of a trusting relationship.

Community pharmacies: from social proximity to other perceived forms of communicative trust

The authoritative form of interaction with prescribers was sometimes contrasted to a less vertical relationship with pharmacy workers. In many cases, some of the above information gaps were filled at community pharmacies:

> No, [doctors] hardly explain. One or another may explain, but not always. (…) Many times, the doctor just writes a prescription and says 'go buy this'. Maybe you leave the doctor's office without knowing what you're going to buy, because that's written in a medical way and people aren't always able to read. So, you'll know what was prescribed maybe in the pharmacy. (male, 39)

> When you go to the hospital, a doctor makes the diagnosis …. He writes and doesn't give you any explanation: 'you take these papers and go to the pharmacy.' … Many times, in public hospitals, when we get to the [hospital] pharmacies there aren't medicines. Many times, the paracetamol is over. Often you have to go outside, to the pharmacies outside. So, what happens? Outside we ask questions, you have the freedom to ask. It's not like in the hospital. I don't know if maybe because it's a business. (male, 35)

While interactions and information exchange were often limited in public healthcare facilities, in community pharmacies most participants felt less intimidated about asking questions – not only regarding the medication they had been prescribed (and sometimes discuss alternatives to it), but also about their health condition. As the expression '*maybe because it's a business*' suggests, the commercial context in which these therapeutic interactions take place also redefined the roles played by each social actor, helping to reduce the hierarchy between them. As the 'patient' in the pharmacy becomes more clearly a 'client', and given the high number of pharmacies across the

city (which increases competition), individuals felt more empowered to negotiate their own treatment' options.

Despite the proliferation of pharmacies across Maputo city, around half of the participants said they usually went to the same ones. Individuals' preferences were based on a combination of criteria, including opening hours, geographic location, the medicines available and their prices, and the quality of interactions with the staff. Underlying many of these more pragmatic and financial choices were different elements of trust, regarding both the pharmacy and the pharmacy workers. Some participants emphasised their familiarity and close relationship with some of the staff:

> They are practically friends, we're from the same block, we know each other. I know almost everyone; these [pharmacy] workers have been there for many years. (male, 50)

Others highlighted other relational aspects which helped the process of trusting both the staff and the medicines they sold or recommended:

> I've always gone to two pharmacies that are in neighbourhood "X". … It's where I've bought my medicines. I don't buy in any other pharmacy I find, no. I really prefer to buy there. (male, 23)

In this latter case, despite having recently moved to a new (though not far) neighbourhood, and now having other pharmacies closer to his new house, this man keeps going back to the same pharmacies:

> It gives me more confidence. Why do I trust them? Because everything I buy there from that person, everything they've given to me, that they've prescribed, has worked. So, that's why it motivates me more to buy at these two pharmacies, because it's a place where I buy medicines that work. … [Also] the people I buy from are fixed, they work there. I never saw strange people there, except for the cashier, or some other person. But the people who assist me are always the same. … So, they're people with whom I've already interacted more. Any questions I have, they clarify. So, it gives more confidence.

As highlighted in this quote, repeated interactions with the same pharmacy staff, good

communication and information exchange, and the efficacy of the medicines recommended or sold (as verified through his own bodily experience), were amongst the most relevant aspects for trusting and being loyal to those specific pharmacies. This also highlights the importance of building up a trusting relationship over time, through continuity of care (also cf. Ackatia-Armah et al., 2016; Mechanic, 1996), which contrasted with the public system where people were rarely seen by the same doctor.

Participants highlighted different criteria for evaluating pharmacy workers' competence. In some cases, the presence of qualified pharmacists, even if only sitting 'in the back', was mentioned as a basis for selecting a trustworthy pharmacy.

> I see what kind of pharmacy I go to. Because pharmacists nowadays have a minimum [training] course. But there are real pharmacists who look like doctors. Thus, there are pharmacies that really create some confidence. We have some, like the Pharmacy "X", where we see that the owners of the pharmacy are there, they are doctors, and they are there in the back. Any question, they answer. There, I feel confident. (female, 38)

The reference to '*real pharmacists who look like doctors*' is illustrative of the symbolic trust in medical doctors and of what they represent, as a source of credibility, when evaluating other healthcare professional categories. This participant went on to add other communicative qualities of reliability, less grounded on providers' formal accreditation, and more related to the reputation and popularity of certain pharmacies, as well as to the dynamics and perceived efficiency of their workers.

> There're places we see …. A pharmacy that's always full, with 20 pharmacies around? Why is that, if the prices there aren't different from the others? The person arrives there and says: 'I want this and this'. [starts gesticulating with her arms showing fast movements] One goes and gets them, the other goes there, even the cashier is there! I ask: 'Hey, how's the one for the skin called?', she replies: 'SKDerm' and I ask 'how much is it?' and she knows the price. So, it's a pharmacy where one sees that 'these people here are really … [starts nodding]'. While there are others where the staff is still thinking 'oh, I don't know if I have this', and is stuttering, and shows a medicine of 200 [Meticals] while there's one of 10 [Meticals]. Then one begins to think 'hmm, this one here doesn't know'.

As other participants also highlighted, pharmacy workers' promptness in answering

questions, and their active search for more affordable solutions, were also ways of evaluating their competence. The above participant also pointed out the importance of recognising the packaging of the products being sold in trusted pharmacies, especially when compared to less regulated markets:

> All [the products] we see there, are things that we see [on TV] … Lately we have TV shows that we watch, those boxes are the same. [Besides] it's not on the streets, these are places we know the inspector goes in to control it. So, there's more or less that confidence.

Emphasis on the similarity of medicine boxes sold in pharmacies to those seen on TV, as a perceived criterion of reliability, underlines the relevance of commodification processes associated with these products. Just as brand names are important symbolic aspects of efficacy (see e.g. Van der Geest and Whyte, 1989; Tan, 1995; Baxerres, 2011), so is the packaging. Examining the packaging for signs of quality in medicine outlets has also been observed in other settings (e.g. Hamill et al., 2019). Thus, having products with such recognisable characteristics available in these regulated (through inspections) shops was a material form of communicative trust.

The above criteria for evaluating the trustworthiness of a pharmacy or its staff were particularly relevant also due to users' awareness of the ambivalent roles of community pharmacy workers, as both healthcare providers and sellers. Thus, while choosing a pharmacy based on the price of medicines was a mere financial advantage for some, for others it was also a criterion for credibility, indicative that certain pharmacies were not looking *only* for profits. Likewise, in some cases, directing their clients to public healthcare facilities in situations perceived as going beyond their competence and in need of medical assistance, was also an indicator of reliability:

> That pharmacy is good. I don't like the ones that want money, where we come and they already want to give you the medicine. Once I went there to buy antibiotic. They said 'no, this antibiotic has to come with the hospital prescription'. And they didn't let me buy. At the time I was upset (laughs) but then I thought 'ah, they did the right thing'. I'm not a nurse, I'm nothing, how come I wanted to take those pills? Then I went to the hospital and they didn't even give me those pills! See?" (female, 29)

Although antibiotics are a prescription-only medicine, they were available over-the-

counter in many pharmacies in Maputo (Rodrigues, 2020; Torres et al., 2020). While the competitiveness between pharmacies often resulted in pharmacists feeling pressured to sell them, in order to keep clients happy (Rodrigues, 2020:8), in some cases, as in the example above, not selling such medicines was perceived as trustworthy action.

Concluding discussion

This paper sought to explore individuals' experiences and interpretations of their interactions with providers in both public healthcare facilities and community pharmacies in Maputo. The analysis focused on communicative rituals and relational processes around diagnosis, prescription or therapeutic recommendation practices, which are central in medical practice and, as illustrated in this analysis, are indicative of different qualities of care, competence and trustworthiness.

As both a category and a process (Blaxter, 1978), diagnosis is at once a ritual in therapeutic encounters and a form of communication that brings legitimacy to both the prescriber's and medical system's authority (Rosenberg, 2002). As a category, diagnosis adds meaning to the illness experience and helps guide and determine the subsequent steps in therapeutic procedures. The increasing use of technological tools within the repertoire of 'biomedical techniques' to assist in medical diagnosis has reconfigured users' expectations not only of medicine (Rosenberg, 2002), but also of providers' performance of such procedures. As examples from Maputo have shown, expectations over the use of biomedical techniques were high, and were one of the main reasons for going to a public healthcare facility. The prescription of laboratorial tests and medical exams was seen as means not only to get more accurate (and trustworthy) diagnosis but also to get access to certain treatments (as in the case of malaria). Thus, in situations perceived as requiring more 'in-depth' examination, providers' use of such diagnostic tools showed that they have their patients' best interests in mind. Hence, as a process, diagnosis expresses providers' competence and care. This involves both an active examination of the problem through certain ritualising procedures, as seen above, and a two-way dialogue with healthcare users about their condition – which was not always present in the situations reported in this study. Such a conversational dimension and information exchange, however, are not only a fundamental component in quality of care and in patient-centred approaches,

but also a patient's right[35]. The absence of such a communicative approach from providers, as illustrated in several examples, caused discontent among healthcare users and also created doubts regarding their medical/clinical assessment in certain situations. In some cases, this resulted in users not following their prescriptions and finding other solutions.

As previously discussed, trust is a social and relational process (Möllering, 2001; Gilson, 2003; Brown, 2008; Rodrigues, 2016) which combines both cognitive and emotional dimensions (Lewis and Weigert, 1985 - see also Hamill et al., 2019 for a discussion on how such bases of trust are articulated in high-risk contexts). Indeed, as illustrated in this study, individuals' expectations about healthcare agents go beyond their purely technical skills to include other caring and affective competencies. However, the disruptive communication described, and the perceived lack of approachability of many healthcare providers, excluded the possibility of developing a shared understanding of the therapeutic situation. This further reproduces (and reinforces) the social distance and understanding gap between patients and providers. While providers might have patients' best interests in mind, without further efforts to improve their communicative interactions, both verbal and non-verbal, their 'intentional actions' may not be interpreted as appropriate from the patient's point of view (Misztal, 1996:24), negatively affecting the consolidation of a trusting relation.

The extension of this analysis to community pharmacies, which play an important part in individuals' therapeutic trajectories, whether before, after or in place of going to a public healthcare facility, added other layers to the phenomenological understanding of communicative trust. Contrary to the usual one-off encounter with providers in the public system, repeated contact with the same pharmacy workers was an important source of reliability (as also observed in Ghana, both with community nurses (Ackatia-Armah et al., 2016) and with dispensers in medicine outlets (Hamill et al., 2019)): it enabled a gradual familiarity between user and provider, a continuity of care, and allowed users to repeatedly reassess the efficiency of providers' work and the efficacy of the medicines they sold or recommended. Pharmacy workers, moreover, played an important role in filling some of the information and communication gaps between patients and public healthcare providers. As often members of the community themselves (see also Logan, 1988; Kamat and Nichter, 1998), many pharmacy workers were socially closer to their clients, were more aware

[35] cf. Decreto, 76/2007.

of individuals' lifeworld concerns, and knew the language which would best convey their advice. This does not mean that people trusted more in pharmacists than in medical doctors or nurses; expectations over their competence and their services were different and users were aware of the business interests behind the counter. Indeed, as shown, users also considered and looked for other qualities (e.g. medicines' prices) and dynamics during client-provider interactions as 'signs of trustworthiness' (as also observed by Hampshire et al. (2017) in herbal clinics in Ghana and Tanzania). Yet, their intermediate position – as part of the community and as trained and/or experienced pharmaceutical care providers – made them a valuable resource for users, which could potentially be explored more as access points to care and information in health policies.

Finally, the availability and use of different symbolic elements of credibility, such as medicines' brands and boxes which are recognisable from other legitimate sources, underlines the relevance of commodification processes associated with these products as they become a material basis of communicative trust. It also adds to the importance of incorporating a material dimension within research on trust (as also previously suggested by Pedersen et al., 2016). More research is needed to deepen understanding of the meaning ascribed to certain objects and materials in different contexts and settings, how and what they communicate, and their role in the process of trust. Further in-depth research should also look at other medicine providers, including those in the informal sector, and pay attention to the downside of trust, particularly when business-oriented communication strategies are used by providers ('signalling' their trustworthiness) as noted by Hampshire et al. (2017), in contexts of high informational asymmetries.

Individuals are actively engaged in therapeutic processes, whether regarding their own or those of their family and community. While prescriptive forms of interaction, as described in this paper, exclude individuals from their treatment decisions inside the consultation room, once outside they are the ones who decide. As examples from Maputo showed, despite a general confidence in medical doctors' competence and authority – illustrated by participants when they discussed doctors' ability to articulate the diagnosis process, referred to signs of expertise (or ritual symbols) such as the use of a 'white coat', or used doctors as a point of reference to assess pharmacists' credibility – it was mainly professionals' communicative performance during the interactions that determined whether such symbolic trust had space or not

to evolve or crystallise (also cf. Rodrigues, 2016). Therefore, while the performance of certain rituals, such as a prescription or medicine dispensing at the end of a therapeutic encounter (whether in a clinic or in a pharmacy), may be an effective form of communication (Whyte et al., 2002), the lack of other communicative elements may compromise the trust in what is being prescribed or advised. If users feel they are not heard or properly examined, if they leave the consultation room with doubts or concerns, if the prescribed treatment is not adequate to their lifeworld or lived experiences, they may consider the prescribed therapy as inappropriate and search for other solutions. This in turn may also shape their healthcare-seeking practices and therapeutic trajectories in similar future situations. Therefore, efforts to improve the quality and responsiveness of healthcare services centred on citizens' needs should take users' perspectives and experiences into account and pay particular attention to these communicative and relational dimensions.

'Home pharmacies', Maputo (2016)
Photographs taken by Carla Rodrigues.

Chapter 5

Beyond health: medicines, food supplements, energetics and the commodification of self-performance[36]

Abstract

With an increasing range of products in global and local markets, more options are available for individuals to enhance their image and their (cognitive, social and physical) performance. These 'performance consumptions' relate to ideals of wellbeing and improvement, and are based on constructed desires, expectations and needs that go beyond the (often blurred) dichotomy of health and illness. Drawing from mixed-methods research in Maputo, Mozambique, this paper discusses individuals' use of medicines and other substances – pharmaceuticals, food supplements, traditional herbs, cosmetics and energy drinks – for managing different aspects of their everyday lives. Through an overview of the main consumption practices, we explore the underlying purposes and strategies of users, and the perceived legitimacy and risks involved when using a variety of products accessible through formal and informal exchange channels. From tiredness to sexual and aesthetic management, we show how the body becomes the locus of experimentation and investment to perform in accordance with socially expected roles, individual aspirations and everyday tasks. With insights from individuals' accounts in Maputo, we aim to add to discussions on pharmaceuticalisation of body management by showing how the emergence of new performance consumptions is articulated with the reconfiguration of more 'traditional' consumption practices.

Introduction

Pharmaceuticalisation and performance management

With an increasingly diverse offer of products in global and local markets, more options are becoming available for individuals to improve self-performance. In the sociological literature, the increasing use of pharmaceuticals to manage personal improvement and well-being has been conceptualised within the process of 'pharmaceuticalisation' (e.g. Coveney et al., 2011; Lopes et al., 2015; Williams et al.,

[36] Originally published as: Rodrigues, C.F., Lopes, N. & Hardon, A. (2019), Beyond health: medicines, food supplements, energetics and the commodification of self-performance in Maputo, Mozambique. *Sociology of Health & Illness*, 41(6): 1005-1022.

2008). Pharmaceuticalisation thus captures 'the potentially widespread use and uptake of pharmaceuticals for diverse purposes which extend far beyond the realms of medicine or the strictly medical' (Williams et al., 2008: 816). This definition encompasses consumption practices that go beyond therapeutic purposes to other dimensions of individual and social lifestyle, and to a wider consumer culture. Sociological literature on pharmaceuticalisation, however, has largely neglected the role of other non-pharmaceutical products, used simultaneously with or as alternatives to pharmaceuticals, in stimulating performance consumption practices (Lopes and Rodrigues, 2015).

The growing popularity of 'enhancement products' includes a variety of substances, such as pharmaceuticals, food supplements, natural/traditional medicines and energy drinks. These are used *strategically* as a means 'to better meet life challenges and/or as self-improvement' (Quintero and Nichter, 2011: 343). These 'enhancement consumptions' can encompass several areas of individuals' social and personal lives, for example 'to improve social, emotional and sexual performance in keeping with cultural norms, values and expectations' (*idem*: 343). While many consumption practices may not necessarily be a way to follow cultural norms, as this paper shows they are often a tool to cope with the pressures resulting from them.

The growing body of sociological and anthropological literature focusing on cognitive, physical and social performance investments shows both increasing variety of substances and possibilities for customising the body (its appearance and performance), and how substances are appropriated and used according to situated needs and/or aspirations. In many contexts, for example, the off-label use of methylphenidate (Ritalin®) amongst university students is reportedly increasing (e.g. Coli et al., 2016; McGabe et al., 2015; Partridge et al., 2013). Besides the aesthetical and recreational purposes of 'non-medical' use of this substance (NIDA 2005 cited by Barros and Ortega 2011), most studies focus on the use of such prescription stimulants as a 'study aid' for increased concentration and alertness (Teter et al., 2006). The management of sleep has also been raising attention as it is associated with 'health, beauty, leisure and pleasure' (Williams and Boden 2004) and linked to both mental and physical performance. Studies on the pharmaceuticalisation of sleep amongst older (e.g. Pegado et al., 2018) and younger people (e.g. Coveney, 2012) show the importance of managing sleep for individuals to perform their everyday tasks. Alongside food supplements used for multiple purposes (academic, physical,

aesthetical), and other consumptions associated with specific 'subcultures' such as bodybuilding (Monaghan et al., 2000), the use of energy drinks, especially amongst youths, has also recently received attention in the literature. These popular drinks are also used as for different purposes, including the recreational; to improve concentration and ability to study (Lopes and Rodrigues, 2015); and to enhance athletic performance (e.g. Hoyte et al., 2013). Other products to self-manage sexual performance and aesthetics, especially amongst youths, are also increasingly available (Hardon et al., 2013). The use of sex enhancers such as sildenafil citrate (Viagra®) to increase pleasure and boost male sexual confidence (Both, 2016), or the ingestion and/or injection of hormones to shape and feminise male bodies (Hardon and Idrus, 2014), are a few examples.

Most of these studies, however, tend to overlook the intersections of more 'traditional' and 'modern' practices, conceptions and resources in the (re)configuration of such consumptions. This paper therefore aims to analyse individuals' practices and perceptions regarding the use of pharmaceuticals, food supplements, cosmetics, herbal/traditional medicines as well as energy drinks to manage the performance of daily tasks, social roles and personal aspirations in Maputo.

Inspired by Goffman's (1959) notion of performance and the management of self-impressions in the 'presentation of the self in everyday life', and Featherstone's (1982) conceptualisation of 'Performing Self' within consumer culture, we focus on the use of medicines and other substances to help manage everyday performance. We use the term 'performance consumptions' (Lopes et al., 2015) to focus more on the social and individual purposes of use, rather than on what the substances were produced, prescribed or advised for.

From enhancement to performing (self)

Besides the literature debates on the ethics around new 'smart drugs' (Cakic, 2009; Rose, 2008) or 'lifestyle drugs' (Flower, 2004; Lexchin, 2001), the ultimate purpose of such products, whether to treat or to enhance, also implies a categorisation that presents itself as problematic (e.g. Coveney et al., 2011). The most common definitions of enhancement technologies stress their purpose as going beyond health maintenance and body repair (Hogle, 2005). The problematic of such a definition serve

as a springboard to the discussion of what, then, is considered 'normal' and 'beyond normal' and may have implications in terms of the (social, medical, ethical) legitimacy of such consumption practices. Ultimately, as Synofzik (2009: 91) argued, 'every treatment presents a certain form of enhancement'. Therefore, instead of confining our discussion to these two categories (enhancement and treatment), our analytical interest focuses on the 'emic' purposes for which people consume certain products.

The increasing centrality of modern pharmaceuticals in individuals' lifestyle and body management also further blurs other dichotomies such as patient and consumer. Such consumption practices are based on constructed desires, expectations and needs that go beyond the *healthism* ideology (Crawford, 1980) and are more related to a wider consumer culture within 'late capitalist society' which emphasises the importance of the body, appearance and performance (Featherstone, 1982). The body has become a 'vehicle of pleasure and self-expression' (*idem*: 18). This relates to what Featherstone calls the *inner* and the *outer* body: the former related to health maintenance and physical performance and the second to the body's appearance and control within social space. As Shilling (1993) suggested, health and appearance have become increasingly associated with each other as they are both part of the 'presentation of self' (Goffman, 1959). In this sense, the 'body has become a project to be worked on as part of a person's self-identity' (Shilling, 1993: 6). Thus, the new conception of self that has emerged within consumer culture, and its new relationship with the body, is that of a 'performing self' as 'it places greater emphasis upon appearance, display and the management of impressions' (Featherstone, 1982: 27).

The construction of (self-) identity, or 'individuality', associated with the emergence of modern societies (see Giddens, 1991) also sheds light on the idea of an 'ongoing' process emphasised by the ethnomethodological writings of Garfinkel (1967) in the social construction of (gendered) self (cf. Brickell 2003), and on how gender is performed in everyday interactions (Brickell, 2003; Butler, 1990; Measham, 2002; West and Zimmerman, 1987). Although this article does not focus on gender performativity, it is this notion of *doing* and the management of self-performance through the use of medicines and other substances that we want to explore in our analysis.

Following from the notion of 'commodification of health' (Nichter, 1989), which refers to the pursuit of health through the consumption of medicines, we look at how the commodification of self-performance together with the global proliferation of

products used for such purposes are expressed in local consumptions in Maputo. Through an overview of the main consumption practices shared and discussed by the study participants, we explore the purposes and strategies of users, as well as the perceived legitimacy and risks involved in the use of a variety of products available through formal and informal exchange channels. From tiredness management to sexual performance and body aesthetics, we show how the body becomes the locus of experimentation and investment to perform in accordance with situated needs or aspirations. Drawing from individuals' experiences and understandings in Maputo, we aim to add to the sociological and anthropological discussions on pharmaceuticalisation of body management, by showing how the emergence of new performance consumptions is articulated with the reconfiguration of older 'more traditional' consumption practices.

In the following section we briefly describe the study setting and recent changes in the Mozambican urban society that set up some of the contextual background for our analysis. We next present the methods used to collect and analyse the data, followed by the main findings of this study. We return to the theoretical discussion in the last section of the paper.

Setting

Maputo is the capital and most populous city of Mozambique, with approximately 1.3 million people (INE, 2017). It is a dynamic and multicultural city, with inhabitants coming from all over the country as well as other parts of the world.

Since independence in 1975, Mozambique, and Maputo in particular, have witnessed rapid political, social and economic changes, with Frelimo's post-independence modernist and socialist reforms, the civil war and the transition to a market economy. Rising socioeconomic inequalities and urban poverty stem from rapid urbanisation, and price and market liberalisation (Hanlon, 2010; Pitcher, 2002). These changes have had implications for the capital's population, in terms of material living condition and also in terms of individuals' aspirations and ambitions. The rise of international investment, population mobility and the importation of goods in the last few decades have further fuelled the proliferation of 'western' and globalised images, values, lifestyle ideals and aesthetic references.

The impact of these changes on sexuality, family structure and gender relations has

received particular attention in the literature (see for instance Arnfred, 2011; Aboim, 2009, regarding the 2003 Family Law). These influences have further contributed to a multiplicity of (sometimes conflicting) views and practices regarding the (re)construction of male and female identities. As Groes-Green (2009) and Aboim (2009) have shown in their studies of changing masculinities in Maputo, the incapacity of many young men to financially provide for their partners and family has led to a change in the paradigm of male dominance, including the emerging importance of sexuality as a tool of power for men, but also for women (Groes-Green, 2013). The concern of many young men with their physical aesthetics, sexual performance and the satisfaction of female partners has become a way to compensate for their lack of financial strength and to seek other forms of power and male authority (Groes-Green, 2009). Emphasising the *agency* of individuals in the quest to fulfil their personal desires and social expectations, these and other studies (e.g. Faria, 2016; Manuel, 2013) are a useful sociocultural background to better understand some of the consumption practices analysed here.

Methods

Data collection

This mixed-methods research generated qualitative and quantitative data. The fieldwork in Maputo city was conducted by the first author for a total of 10 months over two phases. During the first phase of data collection (2013–2014), she undertook observations of client-provider interactions in pharmacies, conducted exploratory interviews and informal conversations with practitioners and representatives from different health-related organisations (pharmacy workers, medical doctors, traditional healers, alternative therapists, a Chinese clinician and members of the Ministry of Health). Additionally, seven focus group discussions (FGDs, n=42) were performed with university students, a theatre group and residents in two socioeconomically different neighbourhoods.

The above qualitative information informed the design of a household survey. Using a random route sampling method, a total of 265 questionnaires were conducted in 15 randomly selected neighbourhoods in Maputo city. The criteria for eligibility were: being Mozambican, living in the house, and being 18 years old or more. Enumerators for the questionnaires were undergraduates studying sociology at the

Eduardo Mondlane University (UEM). They were trained and supervised by the first author, who accompanied them to the neighbourhoods. The survey covered 265 respondents (one person per household) from multiple religions and ethnic backgrounds. The age range of respondents was 18–87 years old (mean 34). Almost two-thirds (68.7%) were female and 31.3 per cent were male. A slight majority was employed (37.7%) and/or students (27.9%).

In the second phase of fieldwork (2016), more in-depth qualitative data were collected. Repeated follow-up interviews (2–3 encounters) were conducted with 17 participants (15 from the household survey and two from the FGDs) and 10 key informants to explore further the initial main findings. Only individuals who had formally agreed to participate in the second part of the project were contacted. This strategy, shown to be effective in previous studies on medicine use (Rodrigues, 2010), allowed the selection of individuals based on their socio-demographic characteristics and consumption practices, and enabled a follow-up of such practices. The selection criteria for the 17 in-depth interviews included an attempted balance in terms of sex (nine men and eight women), age (from 21 to 59, by the time of the interview), school level (from 10th [secondary] grade to university studies) and from 10 different neighbourhoods in Maputo city. The 10 key informants consisted of nine practitioners from different health-related organisations and a personal trainer (PT) working in a gymnasium (gym).

In Maputo, the research project was hosted by the Department of Sociology (through the Health and Society Research Group), Faculty of Arts and Social Sciences, UEM. It received formal ethical approval from the Institutional Committee on Bioethics for Health of the Faculty of Medicine and Maputo Central Hospital (CIBS_FM&HCM) as well as all the required administrative permissions. Written informed consent was obtained from all individuals from the community who participated in the FGDs, household survey and individual interviews. All other informants gave oral consent.

Data analysis

The quantitative data were analysed using IBM SPSS Statistics 20. Both FGDs and interviews were recorded and transcribed. These were first analysed through a thematic content approach (Green and Thorogood, 2014), to distinguish different

dimensions of analysis and types of consumptions. Next, using a phenomenological perspective (Schutz, 1970), we looked at the experiences of users, as well as the perceptions of non- and prospective users, in terms of their reasons and motivations for using (or not) the available products for a variety of situations, the associated risks, their main sources of information and access, and the strategies used for dealing with certain conditions. We considered all kind of products individuals used when managing different aspects of their everyday life, including in terms of prevention, well-being and enhancement of their daily performance.

In the following section, we present a statistical overview of the main consumption practices, which will then be complemented by, and articulated with, qualitative data collected in different stages of the research.

Findings

Statistical overview of the main consumption practices

The survey results show individuals used an array of products (medicines, cosmetics, drinks) for many different purposes. The questionnaire included two blocks of questions regarding potential performance consumptions: one contained a list of products and the other a list of possible consumption situations. Tables 1 and 2 summarise the main results.

Around 48 per cent (n=127) of individuals reported having consumed at least one of the listed products.[37]

The most commonly consumed ones were: energy drinks (25.9%), mainly reported for fatigue, hangover and leisure; SK Derm (19.5%), for pimples, allergy, stains and skin in general; and aloé vera/Mangana (17.9%), for moisturising or lightening the skin. All these products were mostly recommended by friends or family, or taken on their own initiative.

Overall, the consumption of these products was higher amongst young people[38], especially in their 20s, and individuals with higher economic[39] and educational[40]

[37] The following products were analysed: SKDerm, Bio-Ritmo/Sargenor, Aloé Vera/Mangana, Red Bull/ Dragon/Monster, Steroids/Creatine, Xenical, Viagra/Silagra, Furunbao, Enzoy and Gonazororo.

[38] $v^2(3) = 10.583$, $P = 0.014$.

[39] $v^2(2) = 17.217$, $P < 0.001$.

[40] $v^2(3) = 35.684$, $P < 0.001$.

backgrounds. It was also slightly higher amongst men (the main consumers of energy drinks) than women (the main users of SKDerm) but with no significant differences.

Regarding the list of possible situations which might have motivated consumption[41], 36.2 per cent (n=96) of the respondents reported having taken a medicine or other product for at least one of the purposes on the list.

Table 2 shows that 20 per cent of all respondents used something to 'improve the image/ aesthetics' (mostly products to apply on the face, pharmaceuticals and others); 9.1 per cent took something to 'improve good mood' (mainly energy drinks, but also pills); and six per cent took something to 'increase physical resistance' for professional or sport purposes (mainly energy drinks). In most of these situations no health provider was consulted, and individuals followed their own initiative or their friends'/family's suggestions.

Table 1 *The three most commonly consumed products*

List of products	*(%)*
Energy drinks	26
Sk Derm[1]	20
Aloe Vera/Mangana	18

[1] SK Derm is an ointment and contains betamethasone (corticoid), clotrimazole (antifungal) and gentamicin (antibiotic). It is indicated for acne and one of the reported side-effects was skin lightening.

Table 2 *The three main situations managed with substance consumption*

List of situations	*(%)*
Improve image/aesthetics	20
Improve good mood	9
Increase physical resistance	6

The percentage of those who consumed something to improve their performance was, again, higher amongst individuals with higher economic[42] and educational[43] backgrounds. It was also slightly higher amongst men (especially for improving good mood and physical resistance) and young adults (particularly for improving their

[41] The list included performing at school exams; calm down when nervous/restless; improve studying/ concentration; improve good mood; improve image/aesthetics; increase physical resistance; stimulate sexual practice.

[42] $v^2(2) = 7.395$, $P = 0.025$.

[43] $v^2(3) = 10.577$, $P = 0.014$.

image and physical resistance), though with no significant differences.

Energy Drinks as a boost to everyday performance

Amongst the survey respondents who were later interviewed, some expressed how physically and mentally tiring their everyday lives were. Many interviewees did not consider (or could not afford) managing tiredness by consuming any substance. Others resorted to painkillers or anti-inflammatory drugs (especially Ibuprofen) as body relaxers, or opted for energy drinks to enhance physical energy and improve their mood.

While, in many situations, energy drinks were consumed for a recreational purpose, in most reported circumstances they were strategically used to help perform different tasks and roles. In most cases, people had started using energetics due to workload and work-related stress, when studying, or the combination of both activities. Consumption was mainly encouraged by peers to study longer, work harder, give relief from tiredness and perform additional activities.

The *multifunctionalities* attributed to these drinks were also manifested in the strategies reported by the study participants: to combine studying in the morning with evening working (and sometimes counterbalanced later with sleeping pills to manage sleepiness/awakeness); to enable daily work along with household duties (performing the 'good' mother or housewife); and to be able to perform other physical activities after a full working day (such as engaging in sexual activities). In all these situations energy drinks were used to cope with and to help individuals perform their multiple roles as students, workers, mothers, husbands or lovers.

According to some interviewees and FGD participants, one of the main purposes of consuming energy drinks, especially amongst young men, was for sexual activities. One example of such a need for stimulating the body came from a 23-year-old young man, married and father of a 2-year-old baby. Working as a mechanic, he used energy drinks on heavy work days, both for work and after work activities. Although hesitant about the use of sexual enhancers, he was familiar with the most popular ones (such as Viagra, Furunbao, Enzoy and the traditional Mozambican Gonazororo[44]) through accounts of many of his friends:

[44] Also known and marketed as gonazololo.

> I've already felt curiosity in trying out, but I've never tried. The only time I'd needed a stimulus, I used an energetic [drink]. It was a hard day at work. I came home and I came across this situation. So, I decided to take an energetic because it would stimulate me a bit more. (male, 23)

While the use of sexual enhancers was considered a 'delicate issue' and a 'taboo' by all informants, the use of common energy drinks or other 'in-between' strategies (i.e. non-medical products, such as raw egg, black beer, etc.) to stimulate the body for sexual purposes was more openly disclosed. Yet, according to most study informants, the use of sexual enhancers was a widespread and growing practice, especially amongst young people.

Commodification of sexual performance

A variety of sexual enhancers is available at pharmacies, shops, supermarkets, street markets and through informal vendors in Maputo. According to pharmacy workers, these were amongst the most requested medicines without prescription. Although, according to the study participants, products to boost sexual performance have long been used, patterns of use seem to be changing. As a 60-year-old study informant described:

> In the old days, men [above 40s, 50s] needed to go to a traditional healer to get the product. The healer used to prepare it with several plants, put [it] in a bottle and people would drink it along. Besides giving more energy, it cleaned the blood, the veins and the person stayed well. But nowadays young people want to play longer. (male, 60)

He referred to such products as 'fortifiers' that were primarily for older people who lacked energy for an active sexual life. His description underlines a holistic conception of medicine and the body, where these more 'traditional' concoctions were prepared not only to improve sexual activity but also to rehabilitate the body as a whole. This differs from 'modern' medicines (and certain commercialised substances) that are sought as quick, private and easily accessible fixes for specific sexual encounters. It also highlights the therapeutic relations in which such substances were embedded; something 'modern' medicines allow to eschew due to their potential 'liberating'

effect (Van der Geest and Whyte, 1989; Whyte, 1988).

Indeed, the increasing accessibility of ready-to-use products across the city, some at quite affordable prices, and the convenience of their access points seemed to suit users' demands. Some pharmacists reported that Friday and Saturday evenings were the 'sales peaks' for sexual stimulants and condoms, and morning-after pills (emergency contraceptives) on the following days. The availability of these products 'in the streets' further enabled their widespread dissemination amongst different layers of society. Enzoy[45], for example, became popular for being sold in informal street stalls at a low price, as a young adult male described. Another popular product was Furunbao, a Chinese medicine, also available in the streets as well as in pharmacies and other shops (including Chinese grocery stores).

The growing offer of products goes hand in hand with individuals, particularly young people, being increasingly in contact with different aesthetical and performative images and ideals in the media, and the internet in particular. A 35-year-old interviewee, for instance, discussed how increased access to the Internet and the effects of globalisation were changing 'the good values we brought from our heritage'. He explained how girls tried to look like Beyoncé or party hard like Britney Spears, or how boys tried to follow certain performative standards such as the ones promoted by the pornography industry. The influence of pornographic films on sexual practices, expectations and aesthetics amongst young people was also mentioned by few others, and is consistent with other studies both in Maputo (Osório and Cruz e Silva, 2008) and in other African urban contexts (e.g. Both, 2016).

Men also highlighted the pressure to satisfy women. One interviewee who had started using sexual enhancers a few years before the interview described some of the 'modern' challenges:

> [Today] there are vibrators. The girls already use it. At ages you cannot imagine! So, when you find someone with a vibrator, you no longer give her pleasure as the vibrator does. Then you, being a man, will want to overcome that vibrator. You will resort to other things. Because she demands it and says it to our face! (male, 38)

Expressions like 'overcome the vibrator' or 'dominate her' were used when describing

[45] Enzoy is an energy powder drink sold in small packs and was amongst the most cited products during the interviews.

the challenges of a desired male sexual performance, and what it may represent in terms of their *manhood* (cf. Aboim, 2009; Groes-Green, 2009). This brings us back to the theoretical debate on whether individuals are consuming these products to restore their ('normal') energy or to go beyond it. While a few interviewees considered the consumption of sexual stimulants as a way of restoring energy lost because of stress, excessive workload, high alcohol consumption and a poor diet, most argued that sexual stimulants were mainly to enhance and go beyond their 'normal' capacities.

The variability and fluidity of such (often contested) purposes are also expressed by some of the consumption strategies and trajectories. The consumption experience of the previously quoted interviewee illustrates this point. He started using energy drinks to stimulate the body, but later decided to try out something more effective:

> We, men, depending on our own body, we have several products that we take to stimulate. A Red Bull, for example, for some people works well. I always took Red Bull, but in conversations between men, they ended up saying that 'this and this [product] is better than that'. So, we are in that phase of wanting to try everything. We have new [girl] friends and you know what these situations are like. So, we end up experimenting.

Despite the often-present notion of the singularity of the body in expressions like 'depending on our own body' (similar to the relational notion of compatibility in Hardon et al., 2013), it was especially based on privately shared experiences that the logic of experimentation took place. The secrecy of such consumptions, especially regarding female partners, was important to maintain the good reputation. Yet, sexual performance consumptions were not exclusive of men, as we illustrate next.

Different strategies, shared concerns

Discussions about sexual enhancers were mostly around men's use, but a few women also shared their consumption strategies. Besides the new products available to increase pleasure during sex, some women referred to the use of traditional medicines (but also other products, such as lemon or tea leaves), for tightening the vagina and/or stretching the vaginal labia.

One woman had what she called her 'private kit', a small case full of little plastic bags containing different traditional roots, dried herbs and branches. Amongst other

things, she had different products for tightening the vagina and lightening her skin. Having three children from her ex-husband, she was now dating a European man. She used different strategies to keep him attached to her and always made use of her kit whenever they went out. As she argued:

> As I've already seen, there is no love au naturel, you have to add this to be loved. (.. .) But this is not to be used with a poor man, you must keep it in your house. It is for the love of your life, or for the man who will help you living well. (female, 38)

Some of the products she used derived from Northern Mozambique and neighbouring countries. She referred to them as the beauty secret of Macua women, which they used in traditional initiation rites at the age of 12. 'After all, they were not born beautiful', she remarked. According to the female informants, these products are now sought in Maputo as a way to 'compete' with women coming from the North, and also to 'catch' certain men. In this sense, the use of these products seems to be 'disembedded' (Giddens, 1990) from its original meanings, where they were used as part of initiation rites to 'becoming a woman' (Bagnol and Mariano, 2011) within a 'shared socialisation' practice (Arnfred, 2011). Instead, they are used as individual strategic tools to achieve a better sexual performance in order to increase success in finding and keeping the best partner.

Aesthetical performance and changing beauty standards

Commodification of self-performance was also expressed in the use of different substances for the management of other parts of the *outer* body. One-fifth of the survey respondents used something to 'improve image/aesthetics' (Table 2), especially applications for the face. SKDerm was one of the most mentioned products. As one female interviewee said, 'it has become fashionable'. It is indicated for acne[45], but the side-effects make this cream appealing because it lightens the skin. The few women who talked about their own use, highlighted its aesthetical purposes of looking more beautiful and how their skin complexion contrasted with the other girls whenever they went out. The use of whitening products raised controversial discussions

[45] According to the pharmacists consulted during the study, SKderm is subjected to medical prescription, but most pharmacies sell it over-the-counter.

amongst study participants. These were, however, less about the symbolic meanings behind the motivation to pursue a whiter skin (see for example Blay, 2011), than the additional side-effects and the immediate disclosure of its use to others, due to its visual effects.

The management of self-performance encompassed multiple domains and performance consumptions, sometimes simultaneously. The previously quoted female interviewee illustrates this point. Along with diverse substances to enhance her sexual performance, she used other beauty products (including SKDerm, to make her skin lighter), which enabled her to produce and sustain a multi-dimensional performance standard. Not just a working single mother, who sometimes resorted to energy drinks to cope with home duties, she also performed as a beautiful and attractive woman, as well as an exceptionally skilled lover. As part of her *self-performing*, there were also other aesthetical characteristics she pursued. With the particular goal of dating a foreigner, who could provide her with emotional and financial stability, she emphasised both her 'exotic' African attributes, and what she perceived to be a more western female beauty ideal. When talking about such beauty standards, she described how certain notions of body aesthetics have changed during the last decades in Maputo:

> We, Africans, by nature, must be chubby. Men like everything filled up. My deceased godfather used to tell me: 'you have to put some weight on, men don't like skinny women like that'. So, that [idea of skinny women] came from outside. (...) [After the civil war] foreigners started appearing here. They were beautiful foreigners, whom we weren't used to: big, muscular and everything there. And they came with that idea from there, which we did not know, that women are skinny. So, they chose the skinny ones. I was once told in the face by one foreigner whom I liked a lot: 'you are so pretty, just a pity you are so chubby'.

The perceived importance of these new bodily standards, together with recent health concerns of becoming overweight, prompt her to invest in losing weight, with intensive physical exercise and the use of a popular Chinese tea (helping her lose around 44 pounds). Despite variations regarding such standards, and the motivations for achieving them, these changing notions and investments around aesthetical performance were present in most study participants' accounts, both men and women. In the following subsection, we explore further some of those strategies,

particularly within gym consumption practices.

Gym consumptions and the body as a locus of experimentation

According to the household survey, one-third of respondents practiced some kind of sport or physical activity, both for health and/or aesthetical purposes. As one FGD participant described:

> We now care a lot about our aesthetics and there are many pills and teas which we, people of the gym, take to be able to have that desired physique. Women worry more about their fat, to remove it, otherwise we will not look at them. I don't know what the names are, but there are a lot of pills, and for the gym people to have muscles there are some pills too, we also use that ... (male, 35)

This and other FGD participants discussed how both men and women seek different aesthetical goals, and how different substances are increasingly becoming part of their strategies. He continued, pointing to the influence of the media on such standards: It started to be in the present time, because all we do has to do with what we see from the outside, the television and so on. So, we also want to be like that. And as if that was not enough, they make it easier for us with all these medicines.

Alongside the growing variety of products to help shape the body, an increasing number of gyms and fitness centres have been opening in Maputo (Ribeiro, 2014). In such environments, personal trainers (PTs) play a major role as advisers and initiators of certain performance consumptions.

One PT working in a small gym close to the city centre mentioned that they started selling energy drinks and later introduced other products. Some clients wanted to lose weight, others wanted to boost muscles and were not achieving their goals with training alone. Often asked for advice and for quick(er) solutions, PTs started recommending supplements and other products that gradually became available in the gym. These included pre-workout (for extra energy) and post-workout supplements (to alleviate muscle pain), protein bars and shakes, testosterone, anabolic steroids, creatine, energy drinks, glutamine-based tablets, green tea, etc. Some of them, he admitted, were brought illegally from South Africa to Maputo. As he had no formal training, the best way he found to know the products and to test their effects

was by trying them out himself.

> I used myself as a guinea pig, so I could advise others. I've even tried anabolics, but I have not taken them since November. I was gaining a lot of muscle mass, so I stopped. I decided to stop and take only protein and energy drinks.

He continued, elaborating on what he called the 'myth' around the side effects of taking testosterone:

> There is a myth circulating around that testosterone decreases the size of the penis and decreases sexual potency. But it's the contrary. Testosterone increases sexual potency. It has some adverse effects, yes. The person sometimes gets a bit out of their mind (laughs). I took it myself and sometimes it made me more nervous. But I found a way to control myself.

Such embodied form of experiential knowledge was, then, the basis for advising his clients. The lack of training of some PTs together with the lack of information available to users, led clients to also use their own bodies to assess the products. It was, thus, mostly based on such shared experiences that most individuals managed their consumptions in an attempt to achieve the desired results.

While the motivations for consumption varied, it was the *performing self*, whether as an individual or as a group member, that was at stake. This participant's consumption is illustrative of this last point:

> I started [using supplements to boost my muscles] by induction, it was not an advice. I thought: 'Epa, this one is big. He hangs out with me, he's my personal friend, we're going to the disco. This one is also big, we're a group, I've to be big too so the whole group is complete'. So, we'd go out, we'd go to clubs, and so on. It was a lot of gym and we consumed. (male, 33)

The aesthetics of the body were not, therefore, just a matter of looking more attractive. As emphasised above, the bodily performance was also about building an identity (Giddens, 1991, Shilling, 1993). These supplements were thus *a means to an end* (cf. Monaghan et al., 2000); in this case, belonging to a group, where this shared consumption was part of a wider set of shared practices and circumstances.

Performance consumptions: risk perceptions and management strategies

As we have shown so far, most performance consumptions were organised around limited information and were mainly based on shared experiences with peers. The role of social networks as the main source of information, advice and, sometimes, access to the products was manifested amongst different performance domains. The novelty of some products, and the fact that their recommendation practices were mainly out of the medical domain, resulted in concerns about possible side-effects and risks associated with their use. These were often present in individuals' accounts, and were particularly salient in relation to sexual performance.

The perceived risks associated with the use of sexual enhancers were indeed one of the key factors influencing product choice. One of the attractive attributes of Furunbao, for example, was the fact that it was a Chinese *natural* product. As emphasised elsewhere regarding therapeutic medicine use in Maputo (Rodrigues, 2016), one of the risks individuals associated with 'chemical products', i.e. pharmaceuticals, was possible dependency. The perceived risk of depending on substances to perform in a certain way cut across most of the consumptions in general, but was a particular concern regarding sexual activity. In this latter situation, depending on drugs was not so much associated with maintaining a certain level of performance, as was the case of certain products used for aesthetical purposes. The main concern was the possible damage to the natural capacities of the body; i.e. the use of sexual enhancers could result in men not being able to engage in sexual activities anymore without taking pills – a dependency which could affect *manhood*. As one interviewee argued:

> A man who is a man must use his individual strength. (.. .) The negative consequence [of the use of sexual enhancers] is that you may no longer be a real man. (male, 36)

While the purpose of consumption seemed to relate to a specific form of *performing manhood*, the fears around possible irreversible damages were present in individuals accounts and, according to most interviewees, a risk consumers ran.

Generally, the management of perceived risks entailed different strategies: opting for natural products; reducing doses as a way of controlling possible side-effects (e.g. energy drinks, beauty products); or mixing pharmaceutical with 'softer' products (e.g.

SKDerm with other creams, before applying on the face). The wide dissemination of certain products and popular brands amongst individuals' social networks, however, counterbalanced some risk perceptions. The common use of drinks like Red Bull© or Monster©, for example, seemed to contribute to a general idea around them as 'normal drinks' that also helped 'improve good mood' and/or 'restore the strength' of the body.

In some situations, side-effects were also viewed as indicators of efficacy. This was the case of Chinese teas used for losing weight. Having diarrhoea when consuming such products was, according to some informants, a common effect. One interviewee said that when she was feeling sick with such strong effects, she was told at a grocery shop that sold these products: 'Where have you seen weight loss without diarrhoea?' Perceiving it as a common symptom prevented her from going to the hospital. By doing so, and eventually solving the situation with other medicines she knew, the cycle of such performance consumption was kept outside the medical domain.

Concluding discussion

This article sought to explore practices and understandings around the use of medicines and other substances – i.e. pharmaceuticals, food supplements, cosmetics, herbal/traditional medicines and energy drinks – for managing individuals' bodily performance in Maputo. As 'vehicles of ideologies' (Nichter and Vuckovic, 1994), these globally proliferating products, sold and sought for a variety of purposes, carry with them specific ideals of performativity and well-being, and project (new) possibilities in different spheres of everyday life, including work, education, beauty, health, care and well-being. As we have shown, the increasing availability of such products, through different formal and informal distribution channels, opens up opportunities for individuals to configure their performative selves, and above all, reshape expectations around their performance. These substances, and their use, are part of a wider consumer culture that cultivates the importance of self-performance (Featherstone, 1982). Yet, as also shown, these investments are not made in a vacuum. They are sought as tools to fulfil socially expected roles and individual desires and aspirations, which are rooted in locally specific contexts of consumption.

From tiredness management to sexual performance and body aesthetics, the diversity of individual needs and aspirations that motivated the consumptions

analysed in this paper are entangled with local reconfigurations of notions of selfhood, femininities and masculinities, gender roles and broader social relations (see for example Aboim, 2009; Faria, 2016; Groes-Green, 2009, 2013; Manuel, 2013). These are part of, and result from, larger social, political and economic changes, which included rapid urbanisation and a transition to a market economy (Pitcher 2002), and thus a wider circulation of goods, lifestyle ideals and aesthetic references particularly in Maputo. Such reconfigurations were particularly salient amongst youths, the 'makers and breakers' of society (Boek and Honwana, 2005) and young adults, who are creative producers of change and continuity (Manuel, 2013). Many of these consumptions reflected different pressures and anxieties resulting from these (ever changing) gender, individual and/or collective subjectivities.

Through several empirical cases, we have shown how certain shifting standards around the *inner* and *outer* body (Featherstone, 1982) are perceived by and impact on study participants in Maputo. Most importantly, we have analysed how the strategies used by individuals to achieve such performative standards are likewise changing. The use of medicines and other substances as tools to such ends was not, however, evenly regarded as desirable or appropriate by all participants. Indeed, the co-existence of different, and sometimes conflicting, local understandings and practices reflected the unevenly perceived legitimacy of certain performance consumptions. The valorisation of the natural characteristics of the body, for example, seemed to go against the idea of adding something 'artificial' to its 'natural' functioning, possibly resulting in dependency. Consumers, however, emphasised the perceived pressures on their performance, whether directly by others or by the imperatives of their daily obligations. The secrecy of some consumption therefore also became part of the performance.

Following the logics of pharmaceuticalisation of everyday life (Williams et al., 2008, 2011), as discussed in the introductory part of this article, the commodification of self-performance in Maputo expresses an expansion of medicine use by 'healthy people' for purposes considered by the study participants as being mostly outside the medical (and, particularly, biomedical) domain. In this sense, examples from Maputo illustrate a wider social phenomenon in which the construction and (re)presentation of self- (Giddens, 1991; Shilling, 1993) or social (Monaghan et al., 2000) identity and subjectivities are increasingly pursued through the use of medicines and other commercial substances.

Such processes, however, take different shapes in the local contexts where they occur. As we have shown, consumption strategies involved the use of common pharmaceuticals as a tool to perform in certain situations, such as anti-inflammatory and painkillers as body relaxers (see also Hansen et al., 2008); the off-label use of certain products, such as SKDerm, due to their desired side-effects; the reconfiguration and 'disembedding' (Giddens, 1990) of more 'traditional' practices, such as those related to sexual performance (see also Haxaire, 2011); and the emergence of new investments such as the use of supplements to achieve desired aesthetical standards, and the use of energetics to help in the management of everyday tasks. This shows how the emergence of new performance consumptions is articulated with the reconfiguration of older 'more traditional' practices.

The inclusion of a broad range of substances in our analysis, enabled exploring more nuanced and contextual aspects of such process, where the use of pharmaceuticals is articulated with, and sometimes substituted by, other 'in-between' or more natural (or 'traditional') options. As found in previous studies (Lopes et al., 2015), natural medicines or supplements can be instrumentally used in the very process of pharmaceuticalisation. It is in such a pragmatic consumption context that the intersection of 'traditional' and 'modern' products used to deal with the pressures to perform in certain ways takes place. Access to such diverse substances outside the domain of (traditional) medical encounters, made possible through their commercialisation (or commoditisation, cf. Kopytoff, 1986), allows for different ways of appropriation that best fit individuals' interests, and best resonate with their life-world (Schutz, 1970).

The variability of consumption purposes and trajectories, as presented in this article, also emphasise the limitations of analysing such practices according to a therapeutic/restorative versus enhancement framework. As we have shown, individuals appropriate the substances available to them in different ways, with the aim to improve certain aspects of their bodily performance. Yet, as many examples have also illustrated, improvement does not always, nor necessarily imply going beyond the 'natural' capacities of the body. Instead, discussions around the use of such substances were rich in showing the fluid range of subjective purposes of certain consumption practices. Hence, rather than categorising these investments in a dichotomised way, we framed them as performance consumptions with the aim to understand the 'emic' purposes of use; i.e. what individuals sought to achieve through

the use of different substances.

Individuals' social networks played a prominent role in (re)creating and disseminating such practices, and new social actors such as personal trainers also emerged in this performance consumption arena (see also Clamote, 2015). These diverse sources of advice, however, were not always able to provide users with more expert information and orientations. The scarcity of reliable sources of information further induced the reliance on socially shared experiences, usually within a strict group of members of personal networks, and the use of the body as the locus of experimentation to assess the effects, and side-effects, of the products (see also Hardon and Idrus, 2014; Raposo, 2016). Such embodied experiential knowledge, built on the basis of creative experiments with different products and dosages, was thus a way of dealing with the perceived risks and the uncertainty of the results given the singularities of each body.

This paper has provided an overview of the main performance consumptions shared by study participants in a globalised context such as Maputo city. As this and other studies (e.g. Hardon et al., 2013; Lopes et al., 2015) have shown, the generational aspect of performance investments play an important role on how possibilities of change and improvement are perceived and managed; while individuals' socioeconomic and educational backgrounds of individuals appear, as well, as conditions for stimulating certain types of investments. Considering these different consumptions and performance investments together, as part of a broader picture of the performing self, was important. A deeper understanding of the dynamics involved in the use of medicines and other substances in these and other performative areas needs to be further explored.

'Home pharmacy', Maputo (2016)
Photographs taken by Carla Rodrigues.

Chapter 6

Conclusion

In this thesis, I analysed the various meanings and roles that medicines in general, and pharmaceuticals in particular, play in individuals' everyday lives in Maputo – as medical technologies, as therapeutic rituals, as social objects, and as identity and performance-management tools. Focusing on users' own or socially shared practices and experiences, I examined the everyday practical reasoning behind, and the social processes involved in different modalities and contexts of medicine use – whether for treatment, prevention, well-being and/or purposes beyond strictly health concerns. While analysing such practices within the (unevenly distributed and accessible) socioeconomic and therapeutic landscapes in Maputo, I sought to understand and contextually situate (the use of) pharmaceuticals within individuals' lifeworlds and in relation to other medicine options available to them.

As shown, pharmaceuticals are greatly valued technological tools and are sought after both as life-savers as well as a quick and pragmatic way of managing a variety of symptoms and conditions. For varied reasons, however, they are often not a first option – other available substances, including home remedies and 'traditional' or herbal-based medicines, continue to be, for many participants, a first resource in various therapeutic and non-therapeutic situations – and their use in therapeutic trajectories varies according to different interpretive, relational, structural and circumstantial (including financial) factors, as thoroughly analysed in the previous chapters.

Despite the prevalence of a therapeutic pluralism in individuals' consumption practices, the effects of pharmaceuticalisation in everyday life in Maputo are nevertheless manifested at various levels. The increasing number of private pharmacies in the city, particularly in the last decade, is perhaps one of the most visible indicators of such a growing phenomenon. Yet, their ubiquity in individuals' lifeworlds is also manifested in more subtle ways, such as in how pharmaceuticals are used (also in self-medication practices), the various purposes of such use (including those related to lifestyle and social identity), how they circulate within individuals' sociability networks (i.e. family, neighbours, peers), how they are present in individuals' vocabulary (as solutions, to a variety of problems, known by their colour,

format or active ingredient), and how they are incorporated into the household pharmacopeia (as also illustrated in the 'home pharmacy' photographs displayed throughout the thesis).

In order to understand such an embeddedness of pharmaceuticals in individuals' everyday lives in Maputo, in each of the preceding chapters I have focused on different domains and analytical dimensions, while engaging with (and mobilising) various social science literature and theories, which enabled a deeper understanding of the micro processes involved in everyday medicines use. Using a phenomenological approach, and combining both more structured and more in-depth data collection methods, I have explored the use of, the relationships around, and the meanings ascribed to available products and their uses – beyond a one-dimensional rational use framework (to which discussion I return later on in this chapter).

In this final chapter, I discuss some of the main conclusions and highlight some of the key contributions of this study to the existing literature and the ongoing debates within this field. These will be developed around three main sections, which build upon each other and, together, help respond to the aims proposed in the introduction to this thesis. I first start by discussing social rationalities, ways of knowing (and acting upon) and information needs around medicines use. I then turn to the significance of trust in everyday therapeutic and medicine use processes, which turned out to be one of the main findings and theoretical contributions of this thesis. Finally, I return to the initial discussion on commodification and the pharmaceuticalisation of everyday life, where I further reflect on the local trusting dynamics and the social embeddedness of such processes in Maputo, when considering concerns beyond health. The chapter ends with a final note on how the results of this study could be further explored and used in future research endeavours.

Situating rationalities and ways of knowing (and using) medicines in individuals' lifeworlds

As discussed in the introduction to this thesis, the status of *lay* knowledge and rationalities in health is a historically contested one, especially when it comes to medicines use. Such knowledge and rationalities are often assessed based on more *technicist* and normative views, where scientific medical knowledge is assumed to be the single legitimate rationale for 'appropriate' or 'responsible' medicine usage.

Following a critical approach to social rationalities in medicines use (see e.g. Van der Geest et al., 1990; Hardon, 1991; Nichter and Vuckovic, 1994; Etkin and Tan, 1994; Cohen et al., 2001; Whyte et al., 2002; Lopes, 2003, 2010; Britten, 2008), in this thesis I have problematised such notions by showing how different 'modes of reasoning' (Horlick-Jones, 2005) need to be considered and socially situated when examining concrete social practices that may differ from those recommended by biomedical authorities.

Among the various topics explored throughout the thesis, I have engaged with one of the main current global health challenges to which this is particularly linked (see chapter 3), namely the 'irrational use' of antimicrobials by consumers (and providers), not only due to antimicrobials' potential negative effects, but especially owing to concerns over increasing antimicrobial resistance (AMR). As discussed, issues around 'patient demand' (as a driver of high prescribing practices), non-compliance with prescriptions as well as practices of self-medication with antibiotics are repeatedly framed as problematic and pointed to as key concerns[47] that need to be tackled through awareness and educational campaigns to change individual behaviour (WHO, 2015a). Yet, despite the relevance of raising awareness and providing more information to users, prescribers and all other social actors involved in the circulation and use of antimicrobials – especially in settings of high informational asymmetries and where the pharmaceutical market is more loosely regulated, such as Maputo – these awareness and educational programs still seem to rest upon several principles that this and other studies have shown to also be problematic[48]. In addition to the importance of using contextually-significant vocabulary[49], the awareness agenda tends to frame AMR and antibiotic use as a problem of 'individual behaviour', thereby often neglecting broader structural factors and the social fabric in which antibiotics and other medicines are embedded. Frequently departing from a (bio)medical-centred perspective, these knowledge-deficit approaches to health practices also tend to reproduce a vertical transmission of information, while assuming individuals to be passive recipients of authoritative instructions. However, various empirical examples analysed and brought to discussion throughout this thesis challenge this normative approach, in light of the

[47] See e.g. https://www.who.int/news-room/fact-sheets/detail/antibiotic-resistance (last consulted September 2021).

[48] There is growing evidence of the limitations as well as the unintended consequences of various health communication campaigns in different contexts and settings (see e.g. Gerrets, 2012; Haenssgen et al., 2018).

[49] As analysed in chapter 3, many users know their medication by their colour, format or active ingredient (as they are normally prescribed) and 17% of the household survey respondents were not able to identify what antibiotics meant.

practical social and economic realities of medicines prescription and use. These examples show the social dynamics as well as the interpretative and reflexive processes behind self-care practices with medicines – even with those 'enclaved commodities' (Appadurai (1986), cited in Whyte et al., 2002) whose authority is restricted to prescribers – and the 'negotiated order' (Strauss, 1978) of medicines use in individuals' lifeworlds.

As shown throughout the thesis, even when they are prescribed, medicines are assessed according to socially constructed interpretative frameworks, which articulate information from multiple sources – more 'expert' or 'lay' – as well as personal and shared experiences within individuals' sociability networks. Such a framework helps to establish medicines' social legitimacy, quality, efficacy and safety, as well as their appropriateness for different conditions and individual bodies. The integrative structure of such frameworks was evident in various ways, particularly in the syncretism behind a variety of consumption practices. In Maputo, such syncretism also incorporates different historically- and socially-grounded epistemologies and medical practices, which configure the local landscape of therapeutic pluralism and lifeworlds. This helps to explain why, for example, users' concerns about the perceived risks associated with the uncertain dosages of traditional medicines, based on a scientifically controlled and predetermined pharmaceutical production system rationale, were not incompatible with the practice of giving the traditional moon remedy to newborns (which goes against official national recommendations), or with praying practices to enhance the benefits and/or avoid potential (chemical and spiritual) harms of pharmaceuticals and foods[50]. Exploring such reasoning helps to illuminate the syncretism behind certain practices, as individuals integrate different forms of knowledge differently: either based on more abstract notions of the epistemological systems behind the products, or on concrete experiences of consumption (as explored in chapter 2).

These forms of knowledge – which are incorporated into different ways of *knowing* and *acting* upon medicines use (particularly pharmaceuticals) – are dynamic, and in continuous reconfiguration in light of new information and new (bodily and relational) experiences. They are also differently mobilised according to specific situations, where various social, economic and other lifeworld aspects (and tensions)

[50] The practice of praying before pharmaceutical intake is based on evangelic teachings from the church, and was followed by some of the participants in this study. As Krause (2014: 227) also found when analysing such practices and the intersections between biomedicine and Pentecostal healing, "[p]raying over medicines is a way of coping with [the] unpredictability of efficacy".

are considered. This more complex articulation that guides individuals' practical reasoning differs from the one-dimensional rational use approach to medicines that is still often dominant in biomedical authorities' narratives and in public health campaigns.

While in these public health approaches much attention seems to be placed on how people should use medicines and *what they should know* about them, access to quality information about the medicines that are sold, recommended or prescribed to them is very limited. Poor access to more reliable and relevant information (from the users' perspective) was indeed one of the main aspects that most participants in this study complained about. In hospital pharmacies, medicines are dispensed in plastic bags[51], with little more than their active ingredient and instructions on the prescribed regimen written on them; while in the retail community pharmacies, many pharmaceuticals are dispensed in blister packs and thus without the related information leaflets or package inserts. Such a lack of written information further exacerbates most users' dependency on the oral information received by healthcare providers which, as has been shown, is often poor[52].

If we consider the challenges that healthcare providers also often face in terms of accessing reliable information on medicines[53], particularly in LMICs (see e.g. Smith et al., 2020) as also found in this study, it becomes salient how pharmaceuticals, throughout their life cycle, go through different regimes of expertise, each with their different values, agendas and economic activities. Often, each regime tries to exert control over, or to withhold or negotiate, the information shared with the next one. At the end of this chain, most consumers end up obtaining not only more superficial (not to say biased) but often also contradictory information, which circulates through various formal and informal channels. While healthcare providers could play a particularly relevant role in informing and translating more technical information to their patients or clients, as I have analysed in the different chapters of this thesis, the

[51] These come with the exact number of pills administered according to the prescription – as portrayed in the 'home pharmacy' on page 79.

[52] As explored in chapter 3, information asymmetries are also mediated by socioeconomic and educational backgrounds, where more affluent people not only have more access to a wider variety of information sources – including through experts in their social networks and via the Internet – but are also more confident in terms of understanding and translating technical information to fit their own needs and practices. Moreover, individuals with higher educational and socioeconomic backgrounds could also sometimes afford a full medicine package, which would normally come with more information.

[53] As scholars have shown, in addition to the direct role of sales representatives on prescribers, pharmaceutical companies mobilise different strategies to disseminate more favourable information about their products. This can be through medical symposia (where they fund medical professionals to collaborate and speak at such events) or scientific journals (using so-called *ghost writers* or by exerting influence on editorial changes to give a more positive portrayal of the drugs before publication, as well as delaying or withholding negative findings). This produces a bias in the medical literature that prescribing doctors have access to (Abraham, 2010; see also Lakoff, 2006). As Lakoff (2006) has argued, following Healy (2001) and other scholars, in a context of 'interested knowledge', it becomes difficult to disentangle marketing from expertise (or 'rational pharmacology').

often short and highly prescriptive interactions (especially with prescribers in public health facilities) simply further reproduce the information asymmetries already so evident in Maputo.

While access to reliable information on medicines is essential, and was something that participants in this study wished would be more openly available to them, a different way of framing this issue is by also asking: What do people *want to know* about their medicines? In numerous conversations conducted during the fieldwork, participants mentioned that they wanted to know what exactly the medicines would do to their bodies, how the medicines work, their effects and possible side-effects (either short or long term), what they could (or could not) eat or drink while taking them, what would happen if intake was interrupted or a dose forgotten, and to what extent the medication would affect their everyday lives. As other studies have also highlighted (Raynor et al., 2017), users wanted more than just purely technical information on medicines (and how they should or should not be used). They wished for information tailored to addressing their individual needs and concerns. Improving access to reliable information that is useful to users is, therefore, a pressing matter that is neither tackled through educational campaigns, nor through normative instructions on 'rational use'.

Trusting medicines: the significance of trust in therapeutic and medicine use processes

As mentioned above, individuals do not simply passively incorporate new information or instructions into their everyday practices. Rather, they filter, select and make sense of new information or knowledge and integrate it (often partially and sometimes differently, also based on their interpretations and needs), depending on the situation and context of action they find themselves in. While exploring the ways in which people engaged with different kinds of information and forms of knowledge about medicines, the role of trust, especially when managing uncertainty and the perceived associated risks related to medicines use, became evident. The analytical disentanglement of the multifaceted narratives on trust resulted in the identification of different modalities of trust, where both emotional and cognitive dimensions were differently weighted, depending on the context, the circumstances and relationships

involved[54]. It also led to the identification of three main layers of trust (cf. chapter 2): trust in the medical systems behind the products (i.e. the systems that produce the aetiologies, the expertise, and the technological tools to diagnose, monitor and treat); trust in healthcare organisations and providers (i.e. the points of access to those tools and knowledge, and to those who embody the ideological system that is behind their practice); and trust in the experiential knowledge produced through embodied personal and socially-shared experiences with medicines. Strongly intertwined, these layers mediate and are differently combined in decision-making processes, varying according to the kind, quality and amount of information held by individuals, the sources of information or advice they have access to, and the situation they need to manage: i.e. what is at stake, what the potential negative outcomes are and what options are available to them. As shown, in everyday medicines use in Maputo, trust that is rooted in concrete experiences and is supported by affective relationships of social proximity with others – with whom individuals may also share broader aspects of their everyday lives – plays a major role. This helps to explain situations where, despite higher confidence in pharmaceuticals over traditional medicines (due to inferred notions of the scientific knowledge and procedures behind pharmaceuticals), individuals may still prefer to use traditional medicines when they are advised by a trusted person (such as a close family member) to do so.

This multi-layered analytical framework allowed for an overview of the main dimensions (and layers) related to the social and relational processes involved in *trusting medicines*; i.e. in framing the products, the prescriptions or the medicines recommendations as trustworthy and appropriate. It also pointed to specific processes that required deeper analytical attention within each layer. For example, zooming in on the second layer identified above – i.e. interactions with providers in public healthcare facilities and in retail community pharmacies (see chapter 4) – allowed me to take one step further in terms of understanding the role of the relational dimension in decision-making around medicines use. It showed how qualities of care, competence, integrity and trustworthiness are assessed by users, through providers' verbal *and* non-verbal communicative performances. It highlighted the importance of the communicative rituals involved in the processes of diagnosis and prescription, as

[54] For broader and more diverse discussions on these dimensions, see also e.g. Lewis and Weigert (1985), Gilson (2003), Hamill et al. (2019).

well as the significance of other communicative elements (including material ones), which help to create the underlying conditions for building trust.

Following scholars who have highlighted trust as inherently relational (e.g. Gilson, 2003; Brown, 2008), I have shown through my analysis how trust is not only relational, but is also in various ways socially embedded. While much of the literature has examined trust processes in mostly dyadic relationships, this study expands such literature by showing how trust is collectively constructed, whether directly or indirectly. As a reflexive process (Möllering, 2001), trust builds on and is changed through (new) information and daily social interactions and experiences. Yet, the framework through which such information, interactions and experiences are interpreted and assessed, as bases of knowledge, is socially and contextually grounded. New (relevant) information, new public health recommendations – or a new prescription – are also often discussed within individuals' close social networks, where its pertinence or appropriateness is jointly (re)assessed. Thus, more than examining the functions and foundations of trust to understand how people engage with and act upon medicines, *trusting medicines* needs to be understood as a contextual, relational, interpretative and socially embedded process.

A less explored aspect in this study, and seemingly in the overall literature on this topic, is the other side of therapeutic relationships, i.e. healthcare providers as *trusters*. While in this thesis I focused mainly on the social and relational processes that enabled (or not) the building of trusting user-provider relationships from the point of view of users, the interviews I conducted with several healthcare providers – both clinicians and pharmacy workers – also revealed a latent lack of trust in their patients or clients, which seemed to influence their attitudes towards them. How such (un)trusting processes are developed and how they affect or lead providers to adopt certain strategies during therapeutic interactions is a significant feature that requires greater attention. Reflecting on both sides of these therapeutic encounters, one wonders how often the strategies employed by both sides are not only based on, but are also a response to, such underlying (low) levels of mutual (mis)trust.

Pharmaceuticalisation and commodification of everyday life: trusting processes and the social embeddedness of medicine use beyond health concerns

The relevance of understanding trusting processes and the social embeddedness of medicines use was even more salient when analysing such consumption practices beyond strictly health concerns, where quality information and professional or expert guidance is even scarcer. As discussed in the introduction to this thesis, the pharmaceuticalisation of everyday life is entangled with medicalisation processes – yet also exceeds these processes, as the expansion of pharmaceutical use has also been gradually increasing outside of medical jurisdictions (Abraham, 2010; Busfield, 2010). Especially in contexts where structural challenges in terms of accessing healthcare services may further impel therapeutic self-care practices (as shown in chapter 3), pharmaceuticalised and commodified investments to improve self- and/or social performances – such as overcoming tiredness, or sexual and aesthetic management (as analysed in chapter 5) – tend to be even more prominent outside of a medical (particularly biomedical) gaze. In such non-medicalised practices, the role of other social actors (such as unaccredited personal trainers), and especially of peers, becomes even more relevant, particularly when many of those products circulate through informal or unregulated channels.

As discussed in the previous chapter, the circulation of an increasing range of substances, associated with specific ideals of performativity and well-being, have reshaped local social imaginaries on, and opened up the possibilities for acting upon, different spheres of individuals' everyday lives. As shown, the social dissemination of these consumption practices is entangled with local broader social and economic changes, which have reconfigured individuals' livelihoods, as well as notions around sexuality, gender roles, lifestyle ideals, aesthetic references and how people perceive and relate to their own bodies. It is against such a contextual background that these products are sought after; they are used as tools to fulfil different socially constructed (and perceived) expectations, individual desires and needs. Yet, as also shown, their usage does not necessarily follow the purposes for which the products were originally designed. Instead, they gain a new 'social life' (Van der Geest et al., 2002), where their value and meanings are (re)negotiated and their purposes redefined. Similar to therapeutic medicines, these products are 'fluid' (Hardon and Sanabria, 2017), in that they are constantly in a process of 'becoming something else' (cf. Ingold, 2011). Thus, an understanding of the social meanings of these consumption practices requires

looking into the constellations of relationships around their use and into the social contexts where standards of performance and well-being are negotiated, where the legitimacies and efficacies of the products are collectively assessed, and where their risks and effects (including both desirable and undesirable side-effects) are creatively tested.

While conceptualisations of pharmaceuticalisation have mainly focused on the increasing use of pharmaceutical technologies[55], in this study, situating pharmaceutical use within the context of other non-pharmaceutical products was crucial to better understand other local dynamics of this global phenomenon. As shown, this included looking at the use of traditional herbs and plant-based concoctions that were, in some cases, 'disembedded' (Giddens, 1990) from their original social meanings and contexts of use. The commoditisation of such products (and, in some cases, the investments made in their packaging[56]), and their strategic, individualised and sometimes private use, may be seen as part of the effects of pharmaceuticalisation on locally more valued (and sometimes trusted) traditional substances. While the use of these plant-based products was often seen as *less unsafe* – as opposed to the risks associated with the potential 'chemical' damage of pharmaceuticals to the body's natural capacities – more attention was payed to the trustworthiness of those involved in the (often informal and unregulated) sources of access.

Thus, although the commoditisation of traditional, plant-based products, just like pharmaceuticals (cf. Van der Geest and Whyte, 1989), allows for a more individual and private use, such usage – for whatever purposes – is still strongly based on relational and socially embedded contexts of (dis)trust. Yet, while trust is often portrayed as a desirable quality, especially in therapeutic processes (as discussed in previous chapters), it may also lead to less than positive outcomes (Hampshire et al., 2017). Therefore, exploring such ambivalences and/or contradictions in trusting processes, and their role in (and effects on) the pharmaceuticalisation of individuals' everyday lives, seems more relevant not only in more informal contexts of medicine circulation, distribution and use, but particularly when their consumption is primarily based on users' own bodily experimentations.

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[55] This has been pointed out as a limitation of the scope of this concept (see Coveney et al., 2011:390; see also Lopes & Rodrigues, 2015)

[56] Which may also become a material form of communicative trust, as analysed in chapter 4.

End note

Using trust as a lens to analyse therapeutic and medicine use processes has helped to capture the complexity of certain practices and decision-making processes, highlighting how different elements (both cognitive and emotional) are interwoven in different modes of practical reasoning. This allowed for a deeper phenomenological understanding of how people engage with different forms of knowledge (and with their sources) and how they navigate perceived risks and uncertainties related to medicine use, creating *analytical bridges* between narratives and practices that take into account the social contexts and circumstances where these practices and decisions occur.

The analytical framework developed around the multiple layers of trusting processes around medicine use, and particularly the notion of social embeddedness and collective construction of such trust, may have different applications beyond the field and setting in which it has been developed. In the current times of high uncertainty, where entanglements (and the often-ambiguous relationships) between science, economic interests and health policies (at national, international and global levels) are increasingly more exposed and publicly scrutinised, the importance of trust, and of understanding the complex mechanisms of trusting processes, has never been so salient. More in-depth sociological and anthropological scholarship is needed to understand how individuals collectively make sense of and manage uncertainties coming from competing forms of evidence, *truth* claims and controversies – also massively disseminated and amplified by online social media and networks – around (new and old) diseases and medical technologies (including vaccines, antimicrobials[57] and diagnostic tools). This entails going beyond dichotomous approaches that frame different social uptakes of recommendations from public health authorities or governments as not only (ir)rational or (un)informed – as discussed earlier in this chapter – but also as reflecting linear formations of (dis)trust. Instead, (dis)trusting processes need to be understood as socially and historically embedded, grounded in contextualised multi-layered relationships, whose interpretations and legitimacies are collectively negotiated. While the configuration of such layers may differ depending

[57] Particularly when resistance to common antibiotics and other antimicrobials is an increasing part of an ongoing and 'slow-moving' (Welcome, 2020) silent pandemic (see e.g. the latest European Antibiotic Awareness Day campaign: https://www.ema.europa.eu/en/news/european-antibiotic-awareness-day-fighting-silent-pandemic (last consulted in December 2021)).

on the object and context of analysis, this thesis provides an analytical approach which can be useful to better understand these processes.

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Summary

Medicines are powerful technologies and essential therapeutic tools in modern healthcare systems. Despite global discrepancies in terms of pharmaceutical expenditure and consumption, especially between so-called global north and global south settings, people worldwide have become increasingly reliant on medicines both to manage ill-health conditions as well as for well-being, performative and enhancement purposes. In this dissertation, I look at a social and economic reality – the city of Maputo, capital of Mozambique – where insufficiencies in healthcare services and in essential medicines provision in the public healthcare sector occur alongside a growing private pharmaceutical market. Using a mixed-methods approach (including observations in retail pharmacies, conducting focus group discussions, the application of a household survey and repeated follow-up interviews with residents), and focusing on micro social processes involved in everyday medicines use, I analyse the various meanings and roles that medicines in general, and pharmaceuticals in particular, play in individuals' daily lives.

This thesis is written based on a collection of four research articles, here distributed between chapters two to five. In chapter 1, I introduce the aims of this research, present the main background literature that guided the conceptualisation of this work and elaborate on my analytical approach to the topic. Looking at medicines beyond their biochemical properties, as well as dichotomous formulations of 'rational' versus 'irrational' forms of usage, I engage with scholarship which has analysed these therapeutic resources as social phenomena involved in constellations of sociocultural, economic and political relationships and agendas. Following a more critical approach to rationalities in medicine use, the analytical focus in this thesis privileges individuals' experiences and the practical reasoning behind use (Horlick-Jones, 2005), and the social processes involved in different modalities and contexts of use. This implies redirecting atomised approaches to health and consumption practices towards the social contexts where they occur, and the mobilisation of an interpretative perspective that allows for deeper explorations of how individuals and social groups select, interpret and make use of available products (pharmaceuticals or otherwise), but also the various (and sometimes competing) forms of knowledge and information they engage with in their everyday lives. Such an approach is particularly relevant when attending to the social and historical processes in which Maputo's eclectic therapeutic landscape is embedded.

With the aim to understand and contextually situate (the use of) pharmaceuticals within individuals' lifeworlds and in relation to other medicine options in Maputo, in chapter 2 I examine how 'interpretative frameworks' (Schutz, 1970) are differently mobilised by users to make sense of the repertoire of therapeutic resources available to them; and analyse local social understandings around different elements of risk, uncertainty, efficacy and safety. By contrasting pharmaceutical products with traditional medicines and other herbal substances, I explore local world views around notions of science, modernity, tradition and religion, and how they are all differently entangled. In exploring how individuals' different world views are structured, what their knowledge bases are, and how these relate to or inform consumption practices, the notion of trust appeared as a key theoretical and analytical dimension. The significance of trust was particularly evident when managing uncertainty and the perceived associated risks related to medicine use. The analytical untangling of the multifaceted narratives on trust resulted in the identification of different modalities of trust, where both emotional and cognitive dimensions were differently weighted, depending on the context, the circumstances and relationships involved. It also led to the identification of three main layers of trust: trust in the medical systems behind the products; trust in healthcare organisations and providers; and trust in the experiential knowledge produced through embodied personal and socially-shared experiences. Strongly intertwined, these layers are differently combined in decision-making processes, varying according to the kind, quality and amount of information held by individuals, the sources of information or advice they have access to, and the situation they need to manage. As shown in this thesis, in everyday medicine use in Maputo, trust that is rooted in concrete experiences and that is supported by affective relationships of social proximity with others plays a major role.

In chapter 3, the analysis focuses on specific practices involving self-medication and antibiotics. Self-medication with antibiotics is a key topic when it comes to the 'rational use' of medicines in the community, especially due to increasing concerns over the global emergence and spread of antimicrobial resistance. Here, I discuss the various meanings and understandings of 'responsible use'. I pay particular attention to how individuals' knowledge around antibiotic use is constructed and to how different structural and relational processes (particularly with healthcare services and providers) contribute to consumption practices that may not always follow biomedical recommendations of 'rational' or 'appropriate' use. Such recommendations tend to frame the use of non-prescribed antibiotics as an 'individual

behaviour' problem, which needs to be tackled through awareness and educational campaigns and through regulatory enforcement strategies to prevent over-the-counter sales. As argued in this chapter, these normative, atomised and knowledge-deficit approaches to health practices often neglect broader structural factors and the social fabric in which antibiotics and other medicines are embedded. Thus, regulatory measures and interventions to improve antibiotic use need to engage with all the different local social actors and to consider, and be contextually adjusted to, the social and economic realities of medicines prescription, dispensing and use.

In both chapters 2 and 3, interactions with healthcare providers appear as an important relational dimension which has implications for access to information and medicine use. In chapter 4, I take this analysis one step further, by *zooming in* on one of the layers of trust identified in chapter 2, namely the interactions with providers in public healthcare facilities and in retail community pharmacies. Here, I explore the various communicative and relational attributes emphasised by users as meaningful and underpinning different qualities of care, competence, integrity and trustworthiness. Using various empirical examples from Maputo, I highlight the importance of the communicative rituals involved in the processes of diagnosis and prescription, as well as the significance of other communicative elements (including material ones, such as medicine packaging), which help to create the underlying conditions for building trust. I show how this communicative and relational dimension – through providers' verbal *and* non-verbal communicative performances – comes to affect individuals' trust in what is being prescribed or advised.

In chapter 5, the analysis is expanded to include other dimensions of medicine use in Maputo, by exploring the extent to which pharmaceuticals and other substances – including food supplements, traditional herbs, cosmetics and energy drinks – are used by individuals to manage different aspects of their everyday lives, and for purposes beyond strictly health concerns. These include managing tiredness, sexual performance and physical aesthetics, which are linked to perceived social expectations and individuals' own aspirations and needs, which they seek to fulfil through the help of different products. The circulation of an increasing range of substances, associated with specific ideals of performativity and well-being, have reshaped local social imaginaries on, and created possibilities for acting on, different spheres of individuals' everyday lives. Yet, the social dissemination of these consumption practices is entangled with local broader social and economic changes, which have reconfigured

individuals' livelihoods, as well as notions around sexuality, gender roles, lifestyle ideals, aesthetic references and how people perceive and relate to their own bodies. Individuals' investments in managing bodily performance were especially predominant outside of the biomedical gaze and more anchored in the bodily experiences (and experimentations) shared within their personal networks. It was often within these networks and/or in particular social contexts (such as gyms) where some of the standards of performance and well-being were negotiated, where the legitimacies and efficacies of the products were collectively assessed, and where their risks and (side-)effects were creatively tested.

In chapter 6, I draw together the main conclusions and further develop some of the key contributions of this study to the existing literature and ongoing debates in this field. I do so particularly around three main themes. First, on social rationalities, ways of knowing and information needs around medicine use, where I further elaborate on how medicines (whether prescribed or not) are assessed according to socially constructed interpretative frameworks that help establish their social legitimacy, quality, efficacy, safety and appropriateness. In Maputo, the integrative structure of such frameworks was evident in various ways, particularly in the syncretism behind certain practices. Such syncretism also incorporated different historically- and socially-grounded epistemologies and medical practices, which configure the local landscape of therapeutic pluralism and lifeworlds. Individuals' practical reasoning thus revealed a dynamic integration of different forms of knowledge – either based on more abstract notions of the epistemological systems behind the products, or on concrete experiences of consumption – which are in continuous reconfiguration in light of new information and new (bodily and relational) experiences. In a context where informational asymmetries are so evident, efforts are needed to improve access to more reliable but also more relevant information (from the user's perspective), which should address users' needs and concerns. Second, on 'trusting medicines' and the significance of trust in everyday therapeutic and medicine use processes. I have shown through my analysis how trust is not only relational (as previous scholars have highlighted), but also in various ways socially embedded. While much of the literature has examined trust processes in mostly dyadic relationships, this study adds to this literature by showing how trust is collectively constructed, whether directly or indirectly. Third, on local trusting dynamics and the social embeddedness of commodification and pharmaceuticalisation processes, especially when considering concerns beyond

health. As shown, although the commoditisation processes (of both pharmaceuticals or traditional, plant-based products) allow for more individual and private use, such usage – for whatever purposes – is still strongly based on relational and socially embedded contexts of (dis)trust. Thus, (dis)trusting processes around the use of medicine (or other medical technologies) need to be understood as socially and historically embedded, grounded in contextualised multi-layered relationships, whose interpretations and legitimacies are collectively negotiated.

Samenvatting

Medicijnen zijn krachtige technologieën en essentiële therapeutische middelen in moderne gezondheidszorgsystemen. Wereldwijd zijn er grote verschillen in de uitgaven aan, en consumptie van farmaceutische middelen, vooral tussen landen in het zogenaamde mondiale Zuiden en Noorden. Desondanks zijn mensen wereldwijd steeds afhankelijker geworden van medicijnen, zowel om hun gezondheidsproblemen te beheersen als voor welzijns-, prestatie- en verbeteringsdoeleinden. In dit proefschrift kijk ik naar een specifieke sociale en economische realiteit – de stad Maputo, de hoofdstad van Mozambique – die wordt gekenmerkt door tekortkomingen in de verstrekking van essentiële medicijnen in de publieke gezondheidszorg en een groeiende particuliere farmaceutische markt. Met behulp van een mixed-methods aanpak (inclusief observaties in apotheken, focusgroep discussies, een enquête onder huishoudens en herhaalde follow-up interviews met wijkbewoners) gericht op microsociale processen van dagelijks medicijngebruik, analyseer ik de verschillende betekenissen en rollen die medicijnen spelen in het dagelijks leven van individuen, met specifieke aandacht voor het gebruik van farmaceutische geneesmiddelen.

Dit proefschrift is geschreven op basis van vier wetenschappelijke artikelen die zijn verdeeld over de hoofdstukken twee tot en met vijf. In hoofdstuk 1 introduceer ik de doelstellingen van dit onderzoek, bespreek ik de wetenschappelijke literatuur die van belang is voor de conceptualisering van mijn onderzoeksthema, en licht ik mijn analytische benadering toe. Door verder te kijken dan de gebruikelijke focus op biochemische eigenschappen van geneesmiddelen en dichotome formuleringen van 'rationeel' versus 'irrationeel' geneesmiddelengebruik, draag ik bij aan een wetenschapsgebied dat therapeutische middelen analyseert als sociale fenomenen die betrokken zijn bij constellaties van sociaal-culturele, economische en politieke relaties en agenda's. Vanuit een kritische benadering van rationaliteiten in medicijngebruik richt ik mijn analytische focus in dit proefschrift op de ervaringen van individuen en de praktische redenering achter (Horlick-Jones, 2005), en de sociale processen die betrokken zijn bij, verschillende modaliteiten en contexten van medicijngebruik. Dit betekent een heroriëntatie van geïndividualiseerde benaderingen van gezondheids- en consumptiepraktijken naar de sociale context waarin ze voorkomen. Ook wordt er een interpretatief perspectief toegepast dat een diepere verkenning mogelijk maakt van hoe individuen en sociale groepen beschikbare producten (farmaceutische

middelen en anderszins) selecteren, interpreteren en gebruiken, maar ook van de verschillende (en soms concurrerende) vormen van kennis en informatie die ze in hun dagelijks leven tot zich nemen. Een dergelijke benadering is vooral relevant met betrekking tot de sociale en historische processen van het eclectische therapeutische landschap in Maputo.

Met het doel om (het gebruik van) farmaceutische producten te begrijpen en contextueel te situeren binnen de leefwereld van individuen en in relatie tot andere geneeswijzen in Maputo, onderzoek ik in hoofdstuk 2 hoe 'interpretatieve kaders' (Schutz, 1970) op verschillende manieren worden gemobiliseerd om betekenis te geven aan het repertoire van beschikbare therapeutische middelen voor gebruikers. Ook analyseer ik de lokale sociale interpretaties met betrekking tot verschillende elementen van risico, onzekerheid, werkzaamheid en veiligheid. Door farmaceutische producten te contrasteren met traditionele medicijnen en andere kruidensubstanties, onderzoek ik de lokale wereldbeelden rond verschillende noties van wetenschap, moderniteit, traditie en religie, en hoe deze op verschillende manieren met elkaar verweven zijn. Bij het onderzoeken hoe de verschillende wereldbeelden van individuen zijn gestructureerd, op wat voor soort kennis deze zijn gestoeld, en hoe deze zich verhouden tot consumptiepraktijken of deze informeren, kwam het begrip vertrouwen naar voren als een belangrijke theoretische en analytische dimensie. De significantie van het concept vertrouwen vormde een belangrijk aspect van een sociaal en relationeel interpretatieproces, en de rol ervan was met name zichtbaar in relatie tot het omgaan met onzekerheid en de vermeende risico's die werden geassocieerd met medicijngebruik. De analytische ontrafeling van de veelzijdige narratieven over vertrouwen resulteerde in de identificatie van verschillende modaliteiten van vertrouwen, waarbij zowel emotionele als cognitieve dimensies onderscheiden kunnen worden op basis van de context, omstandigheden en relaties. Het leidde ook tot de identificatie van drie verschillende conceptuele lagen van vertrouwen: vertrouwen in de medische systemen achter de producten; vertrouwen in zorgorganisaties en zorgaanbieders; en vertrouwen in de ervaringskennis die ontstaat door belichaamde persoonlijke en sociaal gedeelde ervaringen. Deze lagen, die nauw met elkaar verweven zijn, worden op verschillende manieren gecombineerd in besluitvormingsprocessen, en variëren op basis van het soort, de kwaliteit en de hoeveelheid informatie waarover individuen beschikken, de bronnen van informatie of advies waartoe ze toegang hebben, en de specifieke situatie die ze proberen te beheersen. Zoals ik heb aangetoond speelt vertrouwen, geworteld in concrete

ervaringen en ondersteund door affectieve relaties van sociale nabijheid met anderen, een grote rol bij het dagelijkse medicijngebruik in Maputo.

In hoofdstuk 3 richt de analyse zich op specifieke praktijken op het gebied van zelfmedicatie en antibiotica. Zelfmedicatie met antibiotica is een belangrijk onderwerp als het gaat om het 'rationele gebruik' van geneesmiddelen in de samenleving, vooral vanwege de toenemende bezorgdheid over de wereldwijde opkomst en verspreiding van antimicrobiële resistentie. In dit hoofdstuk bespreek ik de verschillende betekenissen en begrippen van 'verantwoord gebruik' en besteed ik specifieke aandacht aan hoe de kennis van individuen over antibioticagebruik is geconstrueerd. Daarnaast analyseer ik hoe verschillende structurele en relationele processen (met name binnen de gezondheidszorg) bijdragen aan consumptiepraktijken die niet altijd de biomedische aanbevelingen voor 'rationeel' of 'gepast' gebruik volgen. Dergelijke aanbevelingen hebben de neiging om het gebruik van niet-voorgeschreven antibiotica te beschouwen als een probleem van 'individueel gedrag' wat moet worden opgelost door middel van bewustmakings- en voorlichtingscampagnes en door handhaving van de regelgeving om de verkoop van *over-the-counter* medicijnen te voorkomen. Zoals ik heb betoogd in dit hoofdstuk, verbergen zulke normatieve en geïndividualiseerde benaderingen van gezondheidspraktijken – die uitgaan van een tekort aan kennis bij gebruikers - vaak de structurele factoren en de sociale verbanden waarbinnen antibiotica en andere medicijnen zijn ingebed. Daarom zouden regelgeving en interventies om het gebruik van antibiotica te verbeteren moeten worden ontworpen in samenwerking met verschillende lokale maatschappelijke actoren. Daarnaast zouden interventies context-gerelateerde aspecten in acht moeten nemen, en, indien mogelijk, aan worden gepast aan de sociale en economische realiteiten met betrekking tot het voorschrijven, de uitgifte en het gebruiken van geneesmiddelen.

In beide voorgaande hoofdstukken komen interacties met zorgverleners naar voren als een belangrijke relationele dimensie die implicaties heeft voor toegang tot informatie en medicijngebruik.

In hoofdstuk 4 ga ik nog een stap verder in deze analyse door *in te zoomen* op een van de conceptuele lagen van het begrip vertrouwen die in hoofdstuk 2 besproken zijn, namelijk de interacties met zorgverleners in publieke zorginstellingen en in *retail* apotheken binnen gemeenschappen. Ik onderzoek de verschillende communicatieve en relationele aspecten die door gebruikers als betekenisvol werden gezien, en ten

grondslag lagen aan verschillen in percepties van de kwaliteit van zorgverlening, competentie, integriteit en betrouwbaarheid. Aan de hand van verschillende empirische voorbeelden uit Maputo toon ik het belang van de communicatieve rituelen die een rol spelen bij de processen van diagnose en voorschrijven, evenals het belang van andere communicatieve elementen (inclusief materiële, zoals medicijnverpakkingen) die helpen om de onderliggende voorwaarden te creëren voor het opbouwen van vertrouwen. Ik laat zien hoe deze communicatieve en relationele dimensie - via verbale én non-verbale communicatie van zorgverleners - het vertrouwen van individuen beïnvloedt in wat hen wordt voorgeschreven of geadviseerd.

In hoofdstuk 5 wordt de analyse uitgebreid met andere dimensies van medicijngebruik in Maputo, door te onderzoeken in hoeverre geneesmiddelen en andere middelen – waaronder voedingssupplementen, traditionele kruidengeneesmiddelen, cosmetica en energiedrankjes – door individuen worden gebruikt om verschillende aspecten van hun dagelijks leven te reguleren, en voor doeleinden die verder gaan dan uitsluitend gezondheidsproblemen. Deze omvatten het omgaan met vermoeidheid, seksuele prestaties en uiterlijke schoonheid die verband houden met vermeende sociale verwachtingen en de eigen ambities en behoeften van individuen vervuld die men hoopt te realiseren met behulp van verschillende producten. De circulatie van een toenemend aantal middelen, geassocieerd met specifieke idealen van performativiteit en welzijn, heeft lokale sociale verbeeldingen hervormd in verschillende domeinen van het dagelijkse leven van individuen, en nieuwe mogelijkheden geboden om daarop in te spelen. Echter, de sociale verspreiding van deze consumptiepraktijken is verstrengeld met bredere lokale sociale en economische veranderingen die het levensonderhoud van individuen opnieuw hebben geconfigureerd, evenals noties rond seksualiteit, genderrollen, levensstijl idealen, referentiekaders met betrekking tot uiterlijke schoonheid, en hoe mensen hun eigen lichamen waarnemen en zich er tot verhouden. Deze investeringen in het beheersen van lichamelijke prestaties vonden vooral plaats in niet-biomedische contexten en bevonden zich dus buiten de biomedische 'gaze', en waren verankerd in de lichamelijke ervaringen (en experimenten) die individuen in hun persoonlijke netwerken met elkaar deelden. Het is vaak binnen deze persoonlijke netwerken, en/of andere specifieke sociale contexten (zoals sportscholen), waar bepaalde prestatie- en welzijnsnormen worden onderhandeld, waar de legitimiteit en

werkzaamheid van producten collectief wordt beoordeeld, en waar hun risico's en bijwerkingen op een creatieve manier worden getest.

In hoofdstuk 6 breng ik de belangrijkste conclusies samen en ga ik dieper in op de voornaamste bijdragen van dit onderzoek aan de bestaande literatuur en huidige discussies op dit gebied. Ik richt me daarbij voornamelijk op drie hoofdthema's. Het eerste thema betreft sociale rationaliteiten, manieren om te weten ('ways of knowing') en informatiebehoeften rond medicijngebruik. Hierbij ga ik nader in op hoe medicijnen (al dan niet voorgeschreven) worden beoordeeld volgens sociaal geconstrueerde interpretatieve kaders die helpen bij het vaststellen van de sociale legitimiteit, kwaliteit, werkzaamheid, veiligheid en geschiktheid van de producten. In Maputo was de integrale structuur van dergelijke kaders op verschillende manieren waarneembaar, met name in het syncretisme achter bepaalde praktijken. Een dergelijk syncretisme omvatte ook verscheidene historisch en sociaal gefundeerde kennistheorieën en medische praktijken die het lokale landschap van therapeutisch pluralisme en lokale leefwerelden vormgeven. De praktische redeneringen van individuen onthulde dus een dynamische integratie van verschillende vormen van kennis - ofwel gebaseerd op meer abstracte noties van de epistemologische systemen achter de producten, ofwel op concrete ervaringen van consumptie - die voortdurend opnieuw worden geconfigureerd in het licht van nieuwe informatie en nieuwe (lichamelijke en relationele) ervaringen. In een context waar er duidelijk sprake is van asymmetrische informatie zijn inspanningen nodig om de toegang tot betrouwbaardere maar ook relevantere informatie (vanuit het perspectief van de gebruiker) te verbeteren, die tegemoet komen aan de behoeften en zorgen van gebruikers. Het tweede thema waar ik verder op in ga behelst het 'vertrouwen in medicijnen' en de betekenis van vertrouwen in alledaagse therapeutische en medicijngebruiksprocessen. Ik heb in mijn analyse laten zien dat vertrouwen niet alleen relationeel is (zoals eerdere wetenschappers hebben benadrukt) maar ook op verschillende manieren sociaal is ingebed. Hoewel veel wetenschappelijke literatuur vertrouwensprocessen in voornamelijk dyadische relaties bespreekt, breidt dit onderzoek dergelijke literatuur uit door te laten zien hoe vertrouwen collectief wordt geconstrueerd, zowel op een directe als indirecte manier. Het derde thema gaat over de lokale dynamieken van vertrouwen en de sociale inbedding van commodificatie- en farmaceutische processen, vooral als het gaat om kwesties die verder gaan dan gezondheid. Zoals ik heb aangetoond hebben *commoditisation* processen (van zowel farmaceutische als traditionele plantaardige producten) individueel en privégebruik

vergemakkelijkt, maar tegelijkertijd is dergelijk gebruik - voor welke doeleinden dan ook - nog steeds sterk gebaseerd op relationele en sociaal ingebedde contexten van vertrouwen (en wantrouwen). Daarom moeten processen van vertrouwen en wantrouwen rond het gebruik van medicijnen (of andere medische technologieën) worden begrepen als sociaal en historisch ingebed, geworteld in gecontextualiseerde en meervoudig gelaagde relaties waarvan de interpretatie en legitimiteit collectief wordt onderhandeld.

Acknowledgements

I am deeply grateful to so many people who crossed my path during the making and writing of this thesis. No words can do justice to my appreciation for each one of them.

To begin with, I would like to express my gratitude to my supervisors for guiding me along the way. Noémia Lopes, for introducing me to the sociology of pharmaceuticals in 2008 and with whom I have had the privilege of working since then, for the engaging theoretical discussions throughout my PhD, for her demanding analytical rigour, and for always pushing me further to sharpen my arguments. Anita Hardon, for her always stimulating discussions and guidance, and for challenging and helping me to move beyond my sociological background and foster an anthropological and more ethnographic approach to this research. Trudie Gerrits, for her ever-detailed observations and comments on my work, for her pragmatism and problem-solving approach whenever I felt stuck, and especially for caring and for always being present when I needed it most along this trajectory.

None of this work could have been done without all the people in Mozambique, who opened the door of their homes and shared their stories and experiences (therapeutic and otherwise) with me. I'm deeply grateful to them, and to the block chiefs, neighbourhood secretaries and district administrators who welcomed this study. To Tania Sitoe, Sérgio Seni, Felisbela Gaspar and Elisabeth Albino, from the Mozambican Ministry of Health, for receiving and guiding me during my initial steps in the field. To my colleagues at the Eduardo Mondlane University, who warmly welcomed me as a research fellow in the Sociology department, for the opportunity to share and discuss my work plan as well as some of its results, and for the academic and personal support in numerous situations during my fieldwork: in particular, Baltazar Muianga, Nair Teles, Odebe Baloi, Domingos Langa, Book Sambo, João Carlos Colaço, Carlos Cuinhane, Elena Colonna and Madalena Mendonça. I am especially thankful to Cândido Cume for his precious assistance in the first stage of this work, for his help in entering the field and in recruiting the students who worked with me; to Carlos Bavo for his help during the students' methodological training; and to the sociology students who worked with me in the application of the survey and in assisting the focus group discussions: Anacleta Bulacho, Luis Muianga, Claudio Moiane, Ana Sitoi, Otília Maúre, Carla Quimice, Stélio Chambal, Érica Timane,

Hamilton Mazuze, Ermida Magumane, Adelino Bota, Rosta Nhapalela and Florinda Zandamela. A special thanks to Mr. Langa, for his care and dedication.

To all the pharmacists and pharmacy technicians who agreed to be interviewed and participate in this study, and who agreed to have me behind the counter while conducting observations to pharmacy staff-client interactions. To all the healthcare providers I interviewed or talked with, including medical doctors, nurses, Chinese clinicians and traditional medical practitioners. To Gabriel, holistic therapist, for our numerous conversations about health, illness and wellbeing, and the struggles between conventional and non-conventional therapies in Mozambique, for teaching me about his view on the non-pharmacological power of all medicines, for showing me how he and his team produced and distributed homeopathic medicines in the neighbourhoods, and for his friendship. I am also grateful to the many inspiring academics, artists, social activists and friends whom I had the privilege of meeting: especially Genitho Santana, Mónica Fontes, Rui and Lauren Mesquita, Rodrigo Sousa, Jesús Sanjurjo, Andrea Moreira, Carla Braga, Teresinha da Silva, Cristina Castelo Branco, Narciso Mahumana, Sandra Manuel, Helder Nhamaze, among so many others. To Gonçalo Mabunda, for giving me my first home upon my arrival. To Rita Chico, for her friendship, her contagious joy, and for always giving me a shelter wherever she is – Chókwè, Pemba or Maputo; thank you for always making me feel at home. To Jesus Tchakanza, for his incredible support and companionship during my fieldwork, I cannot express my gratitude to you enough. To Aurélio and Moiasse Floriano, whose beautiful family I was privileged to see grow. I'm so grateful for your friendship, the travel adventures and laughs, and for your support before, during and after my fieldwork in Maputo. My dear friend Aurélio … wherever you are now, I hope you are proud with the outcome of this work. I miss you dearly.

In Amsterdam, I was fortunate to share this academic journey with my wonderful PhD colleagues from the *Health, Care and the Body* programme group and beyond. To Willemijn Krebbekx and Lex Kuiper, for their love and support during the toughest period of this trajectory, after being diagnosed with breast cancer at the end of my first phase of fieldwork. To Inês Faria, my dear friend, for reading and commenting on most of the chapters in this thesis, for her inspiring positivity and pragmatism, and for the fun moments in Amsterdam, Lisbon, Brighton, Bristol and elsewhere. To them, and to the other prefielders and postfielders (or somewhere in between): Anneke Beerkens, Apostolos Andrikopoulos, Marten Boekelo, Hanna Henao, Tu Ahn Hoang,

Yiran Wang, Rosalijn Both, Eva Vernooij, Christopher Pell, Tanja Ahlin, Shahana Siddiqui, Nuria Rossel, Natashe Demos Lekker, Annelieke Driessen, Carola Tize, Megan Raschig, Susanne van der Buuse, Stinne Grinna, Ildikó Plájás, Laban Musinguzi, Emmanueil Turinawei, Busarin Lertchavalitsakul, and so many others, for the numerous and stimulating meetings and collective brainstorms, for helping me navigate UvA's academic and bureaucratic life and for making this journey (also) fun and inspiring in so many ways. To my wonderful paranymphs and dearest friends, Eva and Tanja, for making this final bit so much lighter. I was also privileged to be surrounded by so many other brilliant and supportive academics in the anthropology and sociology departments, including Sjaak van der Geest and Patrick Brown, whose inspirational influence is visible in this thesis, but also to Ria Reis, Mattijs van der Port, Stuart Blume, Rachel Spronk, Kristine Krause, Danny de Vries, Bregje de Kok, among so many others. I'm very thankful to all administrative support since the beginning of my PhD trajectory at AISSR, especially Janus Oomen, Muriël Kiesel, Nicole Schulp, Yomi van der Veen, Danny van der Poel and Joanne Oakes. To Hayley Murray, for her great support especially during the final stage of this process. A special thanks to Zoe Goldstein and to Steve Russel for editing different parts of this thesis, to Eva Vernooij for translating the summary to Dutch, and to Martijn van Dam for designing the beautiful layout cover for this book.

In parallel to my PhD, I worked in several other research projects, both in Portugal and the UK, which were greatly inspiring for my own individual work and academic development. I am grateful to my colleagues from the Population Health Sciences Department, Bristol Medical School (University of Bristol), in particular Helen Lambert, Christie Cabral, Adam Brisley, Meixuan Chen, Melissa Cole, Ali Vedadhir and the Anthropology Theory Group – I have learned so much from each one of you. To my colleagues at the Centre for Research and Studies in Sociology (Iscte – University Institute of Lisbon), in particular Elsa Pegado, Hélder Raposo and Telmo Clamote, with whom I have been lucky enough to work for many years – thank you for helping me grow as a sociologist.

Living and working between several countries has not been an easy task, and the love and support of my closest friends helped me to stay rooted. I am especially grateful to Cristina Carreiro, Magda Nico, Mário Rui Vieira, Margarida Barroso, Paula Jerónimo and João Almeida, Diogo Lorena, Sara Trindade and Catarina Preto, for

always giving me emotional stability amidst so many uncertain times – muito obrigada, meus queridos! To them and to Jolie Ennik, for helping me stay balanced.

Last but definitely not least. My family, without whom I would never have come close to finishing this project. My parents, Conceição and Mário, for their unconditional love, care and support, and for rescuing my courage and strength so many times. My brother and nephews, Ricardo, Diogo and Tiago, for their warmth and joy every time we spent together (and for always waiting for me to finish my daily work to play, talk and/or go for a walk). Finally, to Ruben, my best friend and life partner, for being by my side during the most difficult and challenging years of this long trajectory, for always trying to boost my confidence whenever I felt lost, for everything we've lived so far and for the exciting adventures yet to come.