

Understandings and social practices of medications for Zimbabwean households in New Zealand

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Abstract: Medications are a central part of health care. How medications are understood and used by people in everyday life remains unclear. This study looks at understanding and social practices of medications in everyday life for Zimbabwean households in New Zealand. This project investigates understandings of medications and their use, taking account of all forms of medications, medical drugs, alternative medicines, traditional medicines and dietary supplements. Four Zimbabwean migrant families who all reside in Hamilton took part in this study. Data were collected using a variety of methods which included individual interviews with the families, household discussions, photographs, diaries, material objects, and media content to capture the complex and fluid nature of popular understandings and use of medications. This research provides insight into the cultural values and practices of these four families pertaining to how they acquired, used, shared, and stored indigenous and biomedical medications. Four key themes were identified: the preference of biomedical over traditional medications, storage, sharing and safety of medications; availability and affordability of medications; and the influence of the media in making decisions to purchase medications. Knowledge of how meanings are linked to the things people do with medications will inform strategies for ensuring that medication use is safe and effective.

Keywords: healthy communities; indigenous; medications; Zimbabwean households

Introduction

Medications form part of our everyday lives. They are used for the sustenance of health, and for the treatment of illnesses that people may experience throughout their lifetimes. Medications can help us stay healthy, cure many ailments, relieve the symptoms of disease and ultimately improve the quality of our lives (National Prescribing Services Limited, 2009).

Medications can be noxious as well as beneficial and are potent symbols and tokens of hope for people in distress (Whyte, et al., 2002). In general, people take medications to reduce the likelihood of bodily malfunction, and social and personal disruption. Others take medications as a way of reducing stress and worry. A marked increase on reliance on medication therapy as the primary intervention for most illnesses has been reported worldwide (Hughes & Blegen, 2008).

Patients who rely on medicinal interventions are exposed to potential harm as well as benefits. Medications can have undesirable or dangerous side effects with some leading to dependence and abuse. Medications, do not solve all problems, teach adaptive coping skills, mend broken hearts or fill empty lives (Preston et al., 2010). They do allow people to feel secure when preventing and combating illness and to function “normally” when performing their daily activities (Conrad, 1985).

Strict and proper usage of medication is necessary for safety reasons hence the need to adhere to administering medication to the right patient, with the right medication, the right dosage, at the right time and through the right route (Hughes & Blegen, 2008). In Australia for example, medication errors accounted for 140,000 hospital admissions per year costing about \$380m per year in the public health system alone (National Prescribing Service Limited, 2009). In the United States, unsafe use of medications results in over 700,000 visits to the hospital emergency departments per year (Hughes & Blegen, 2008).

Households are primary sites for the consumption of medications. Studies have shown that there are a number of influencing factors which take place once medications are taken into households. Patients may decide not to follow proper instructions in taking medications as per prescription. Correct doses or sequences are ignored and this can result in endangering the life of the patient (Conrad, 1985).

Medications are a central part of health care. However, how medications are understood and used by people in their homes remains unclear. The present research investigates householder understandings of medications and their use, taking into account all forms of medications, medical drugs, alternative medicines, traditional medicines and dietary supplements. Data was collected from four Zimbabwean households, using a variety of methods (interviews, photographs, diaries, material objects, media content) to capture the complex and fluid nature of popular understandings and use of medications. Knowledge of how meanings are linked to the things people do with medications will inform strategies for ensuring that medication use is safe and effective.

The point of this project is to advance present knowledge about the meanings of medications, understandings of their safety and risk, the flow of medications, and the social practices that surround medication use. This research aims to:

1. Explore householder knowledge of medications, how medications work, and what it means to take medication.
2. Document socio-cultural practices involving medications within Zimbabwean migrant households in New Zealand.
3. Document how, when and why biomedical and traditional Zimbabwean medications are accessed and used.

The dissemination of findings from this study will potentially enhance healthcare professionals' knowledge of medication practices in the everyday lives of Zimbabwean people who are residents in New Zealand. Although medications are not without risks, documenting a clear understanding of medication-taking practices for Zimbabwean people, and how these are utilised into their daily lives, may enhance efforts to support the health needs of Zimbabwean and migrant households and the development of services and interventions that support migrant families in the management of illness.

This study investigates the supply of safe and efficacious medications that find their way into the homes of Zimbabwean migrants who are based in Hamilton, New Zealand. The research also investigates each Zimbabwean household's understandings of the term medications and how they acquire their medications and use them safely. Little is known about medication use in migrant and minority group households in Organisation for Economic Co-operation and Development (OECD) countries like New Zealand. New Zealand is one of only two developed countries to permit direct-to-consumer advertising (DTCA) for prescription drugs, making it a significant site for medication research. This differs greatly from Zimbabwe where DTCA is monitored considerably. Participants in this study were born in urbanised parts of Zimbabwe, whereas 80% of the population live in rural areas (Chenga, 1986). All participants are from middle class professional backgrounds where, due to their social and economic status, they were able to afford biomedical medication and had access to medical insurance. Information gathered from this study will help service providers and users understand the importance of proper use and storage of the medications from the perspective of migrants whose culture they may not be familiar with. This investigation will also help doctors, pharmacists and other providers understand medication practices in everyday lives and understand the meaning of medications from the view point of this new group of immigrants.

This research is presented in four sections. The following section explores the historical and cultural context of the four migrant households which took part in the research. This is important as cultural traditions surrounding medication use are often brought with migrants. Understanding the migrants' way of living back home will also give us an insight into how they have adjusted in a new environment. Relevant literature exploring how medications are obtained, brought into homes, stored and used is also investigated. The second section considers the methods that were utilised in this study

to capture the complex and fluid nature of popular understandings and use of medications from each household. The third section analyses the data gathered from the four households. This section will explore how each Zimbabwean household understood, treated and used medications in their everyday lives. The final section concludes the study.

Brief history of Zimbabweans as a people and their culture

This study will explore specific Zimbabwean ways of understanding medications and cultural practices involving medications. There will be different definitions of what constitutes medications, especially within households that incorporate indigenous cultural practices around health care and health maintenance. I am interested in exploring indigenous understandings and practices associated with medications generally, and I expect these to be different in a range of ways (what is understood as medication, how it is used, who it is given to). It is therefore possible that culturally different findings may result from the analysis and will lead to publications.

Zimbabwe lies in the southern part of Africa. Its population is estimated at 12.5 million (United Nations, 2008). The country is populated predominantly by the indigenous people of Shona and Ndebele descent and other minority ethnic groups. Zimbabwe was colonised by the British in 1890 before gaining its independence in 1980. Before the colonial era and the introduction of conventional or modern medicine, Zimbabweans practiced traditional or indigenous medications for all ailments that they experienced whether physical, emotional or mental. Traditional healers who supplied the indigenous medications were not only regarded as medical specialists, but also dealt with social problems experienced within their communities. With the introduction of modern medical science, Christianity, biomedical education and colonialism, traditional medicines were despised and lost their value. The use of traditional medicines was discouraged and the colonisers underestimated their effectiveness in the treatment of many different illnesses (Last & Chavunduka, 1986).

The introduction of Christian education was regarded as one way of weakening the practice of traditional medication, practice and beliefs thus forcing people to abandon their traditional religious ideas and their faith in traditional healers. Colonial governments and missionaries built more hospitals aiming at discouraging the indigenous population from consulting the traditional healers and their medications (Last & Chavunduka, 1986). Despite attempts made by early missionaries and government officials to suppress the activities of the traditional healers, many people continue to use the services of traditional healers and their medications (Last & Chavunduka, 1986).

Today, Zimbabweans in general use both traditional and biomedical medications (Kazembe, 2007). Choosing between modern and traditional medications depends on a number of factors that include the cost of each type of treatment, accessibility, and knowledge of the probable effects of each kind of treatment. The majority of Zimbabweans consult traditional health practitioners (THP) at some point in their lives, meaning that traditional health practice is still part of the Zimbabwean culture as well as being a component of the health care delivery system at both the individual and community level (Ministry of Health and Child Welfare, n.d.). Zimbabweans are fully aware that biomedical medical practitioners use scientifically proven methods in their treatment of illnesses. In contrast, they are also aware that the use of traditional medications is acquired through observation and knowledge passed from one generation to the next. Therefore, the uses of traditional medicines are not easy to quantify or replicate (Kazembe, 2007).

Issues of safety apply to the use of both traditional and biomedical medications. Traditional and herbal medicines taken simultaneously can interact with biomedical medications (Last & Chavunduka, 1986). Although indigenous health and biomedical systems are often administered in different ways, it is necessary that both systems are applied in a safe environment which benefits both the service providers and those who need their services. Cultural differences can also lead to a misunderstanding of medication instructions especially of the package insert information which very few people take time to read (Ministry of Health and Child Welfare, 2010). The use of harmful

traditional medications is forbidden (Last & Chavunduka, 1986), thus emphasising the importance of safety measures in the administration of indigenous medicines.

Medications in households

The health care reforms in biomedical countries have led to a shift in the delivery of health care away from formal places such as hospitals and institutions towards more informal settings such as the home (Dyck, et al., 2005). This renders the home as a potential “therapeutic landscape” (Gesler, 1992) and a place of care (Gleeson & Kearns, 2001). The home involves not only practices of healing and recovery from sickness, but also those employed for the maintenance of health. Medication practices, and associated understandings, form a large and significant component of the care practices that take place within the home. Exploring medication practices within the home reveals such things as understandings of ‘proper’ usage, risk, adherence, drug sharing, and related concerns, such as the relation between conventional and alternative medications (Sorensen, et al., 2006).

Medications are one of the most widely used medical technologies, both for treating illness and for sustaining health. They also carry an important cost to the health care system. PHARMAC reports the community drug bill for the year to June 2006 at \$563 million, and estimates this would be more than \$1 billion higher without their regulatory interventions (PHARMAC, 2007). Further, medications are the frequent focus of comment and debate in New Zealand. Contemporary processes of commoditisation and consumption are influential in shaping local understandings and practices concerning medications (Applbaum, 2006; Henderson & Petersen, 2002). New Zealand is one of only two developed countries to permit direct-to-consumer advertising (DTCA) for prescription drugs, making it a significant site for medication research. The participants in this study have come from a country that differs in terms of DTCA and the primary reliance on biomedical medications, the majority of Zimbabweans will consult a traditional health practitioner (THP) at some point in their lives (Ministry of Health and Child Welfare, n.d.) and DTCA is greatly reduced. DTCA is a highly controversial activity (Almasi, et al., 2006; Toop, et al., 2003), invoking tensions around the costs and enhancement of care, the development of informed consumers, and the potential for increased medicalisation of everyday life. These processes are argued to foster lay expectations of a “pill for every ill” (Chamberlain, 2004) and raise questions about whether the activities of pharmaceutical companies are “life-saving or life-styling” (Triggle, 2005). These companies have been implicated in disease-mongering and questionable practices in their associations with health professionals and researchers (Heath, 2006), and challenged about the effects of their marketing.

Media messages about medical products, risks and uses are also engaged in the home as a primary locale for audiencing (Ang, 1996). Although media is an important source of information about health and medication, and where we could source our medication needs, there is great concern about the quality of medical reporting in newspapers, televisions, magazines and internet (Moynihan, et al, 1999). Cultural knowledge and information are brought into our homes via media through various forms including electronic gadgets which have become part of us. The gadgets now define and shape our everyday reality and dictate what medications are best for us. Advertisers invest large sums of money on commercials particularly television due to its popularity. Constantly barraging homes with commercials becomes a reminder to households that taking medications is an acceptable and normal way of living our day to day lives (Moynihan, et al., 1999). Advertising therefore reaffirms the belief that medications are necessary when taken for a real or an imagined symptom (Hanson, et al., 2006).

Medication use involves risk, and can be the source of unintended ill-health, through treatments given without indication, improper drug selection, too little or too much of the drug taken, non-compliance with drug regimes, adverse drug reactions, or interactions between medications (Zed, 2005). These can be associated with significant morbidity and mortality (Johnson & Bootman, 1995; Lisby et al., 2005; McDonnell & Jacobs, 2002; Winterstein et al., 2004). All of this points to how people are surrounded and engaged by medications in their everyday lives. Some forms of drugs, such as pain relief and cough medications are widely promoted and routinely consumed as part of daily life. For example, PHARMAC reports more than 1.4 million prescriptions for paracetamol were issued in the year to June 2006 (PHARMAC, 2007). In fact, the ingestion of many such substances is increasingly

considered to be a routine practice, somewhat like eating an apple or having a drink of water, rather than taking a pill in the traditional medical sense. Boundaries between drugs, food and dietary supplements are blurring (Chamberlain, 2004). Currently we have very limited knowledge about the multiple mechanisms involved in the daily use and misuse of medications (Hodgetts, et al., 2011).

Medications have “social lives” as well as pharmacological lives (Whyte, et al., 2002); once in the hands of people they can represent not only relief from suffering or the maintenance of health, but also represent identity, morality, relationships, care, healing and hope, amongst other things. These non-medical meanings are, however, implicated in the therapeutic processes associated with their use, enhancing or limiting these functions. Attention to these complex social and symbolic meanings of medications, both medical and non-medical, will help us understand how social practices involving medications can impinge on the quality of health and health care (van der Geest & Hardon, 2006).

This study is informed by the notion that “everything we study is emplaced” (Gieryn, 2000, p. 468), and that the household, or more particularly the home, is “a particularly significant type of place” (Easthope, 2004, p. 128) for medication storage and use (Sorensen, et al., 2005). Notions of home are complex (Mallett, 2004), covering not only the idea of a place to dwell (and the associated dwelling), but also invoking a variety of meanings, such as personal identity, security and privacy.

Exploring the meanings of medications for Zimbabwean households in New Zealand raises a different set of issues for medication practices, invoking a different “slice of daily life”, and issues of vulnerability and morality. They provide access to particular concerns around use, risk and care (Balakrishnan, et al., 2006), and the meanings and practices of medications in the context of childhood and parenting (Conn, et al., 2007). Households containing a young child provide a site where medication use will be significant and involve other household members. They also constitute a therapeutic space of care where the meanings of medications and their use are highly salient (Hodgetts, et al., 2011). Medications are a fundamental technology of treatment and self-care, with significant potential to impact on health. Efficacy in medication use is an important determinant of health for such groups and a significant factor to consider in redressing health inequalities. In the next section, we will consider the methods utilised in this study to explore migrant experiences of medications in Zimbabwe and New Zealand.

Method

The project utilises a broad ethnographic approach (Hodgetts, et.al., 2011) to capture the complexities and fluidity of medication use in daily life. It investigates understandings and practices around medications in households, in the general community, and in media representations. Data collection focused on four Zimbabwean households in Hamilton over a three-week period in January 2011, using a variety of methods (interviews, photographs, diaries, mapping, material objects, media content) to capture the complex and fluid nature of popular understandings and use of medications. The research is informed by the notion that households are a therapeutic space for care and maintenance of health, and constitute a significant place for medication storage and use in everyday life. Households are also important sites for media engagements. Households with a chronically ill member provide situations where medications are in frequent use. Households with children raise additional issues for medication use around vulnerability and care, childhood and parenting. Data from people in the community and media representations provide general contextual understandings of medications and use, and contrast with data from the other domains.

Interviews will be carried out among four Zimbabwean immigrant households who are all based in Hamilton, New Zealand. The families who take part in this research have come from cities spread across Zimbabwe and all at one time in their lives have used both traditional and biomedical medications. Ethical approval was obtained from the University of Waikato’s Psychological Research and Ethics Committee.

Participants

Four Zimbabwean families participated in this research. The recruitment process began by approaching household 'heads' who were all male and friends of the researcher. All participants are permanent residents of New Zealand and reside in Hamilton. Participants were recruited through the researcher's personal family connections. All interviews were held in English at the participants' houses. Pseudonyms were used in this research to protect privacy and to ensure confidentiality. Participants were informed that they could withdraw from the research at any time. The respondents are referred to in this research as the Sibanda, Rugare, Gumbo and Moyo households.

The Sibanda household is comprised of four members and these include Themba a male aged 48 who is married to Ruth aged 38. The couple has two sons Rob (16) and Jack (12). All four members of Sibanda household were born in Zimbabwe. The Sibanda household owns a home in one of Hamilton's suburbs. The home consists of three bedrooms, a lounge, a dining room, a kitchen, a bathroom, a toilet and an en suite. Themba and Ruth took part in the interview.

The Rugare household is made up of four members who immigrated to New Zealand four years ago. Joe (43) is male and is married to Ann (39). They have two children, a girl Rungano (17) and a boy Tim (13). The family lives in a rented home with three bedrooms, a kitchen, dining room, lounge, a toilet, a bathroom and a veranda. Joe and Ann took part in the interview.

The Gumbo family includes Mark (42) who is married to Edith (34). The couple have two children, a boy Tongai (15) and Thembie (6). The couple lives in Hamilton in a house of their own which is comprised of three bedrooms, a kitchen, a lounge, a dining room, a toilet, and a garage. The family have lived in New Zealand for five years. Edith took part in this research.

The Moyo family is comprised of two adults and three young children. Matt is married to Sue and they have two boys whose names are Simba and Jeff. Molly is the only girl in the family. Jeff is the only member of the family who was born here in New Zealand. The rest of the family immigrated to New Zealand a few years back. Participants in this household elected not to disclose their ages. The Moyo family resides in Hamilton and own their home which has three bedrooms, a dining room, a lounge, a bath room, a toilet, a laundry room and a veranda.

Procedures

The research process was carried out in four stages: pre-data collection, initial household discussion, tasks and individual interviews and the exit interview. Participants were given two weeks to complete the required tasks. Contact was made frequently either through telephone calls, household visits or texting.

In the pre-data collection stage, the four Zimbabwean households were introduced separately to the research and its aims and objectives were clearly outlined. Participants were given the option to consider medications, not only in terms of biomedical medications, but also from the perspective of indigenous traditional medications, alternatives and supplements. During the initial household discussion stage a general discussion about medications, their meanings and uses took place. Maps were drawn of each house that illustrated the specific places where medications were normally stored.

One participant provided the researcher with a copy of the architectural house plan and indicated where the medications were kept. The other three households drew maps of their houses. In some cases the researcher helped participants draw the maps. The researcher made it clear to the participants that the exact location of where the medications were normally kept was an important element of the research. After mapping the households, an X marked the exact location of where medications were kept within the households.

Diaries were handed over to the participants who were to record their daily experiences with medications. Matt wrote in his diary:

Not that I like it, or will order it, but information technology has changed the way of advertising, and sometimes you don't have to look for information, but information just lands on your desktop.

Diaries were an important part of the research as they provided a record that demonstrated each individual's understanding of their present and/or past health experiences (Elliot, 1997). According to Milligan et al. (2005) diaries can be referred to and be useful in the future. Diaries were used during interviews to discuss the participant's entries, thoughts and reflections. General medication diaries required the participants to record their daily encounters with medications whether within or outside of the home, workplace or through media.

The third stage required that data be gathered by one member of each of the participating households. The stage included taking photographs of the households' medications. Photographs and Medication Use Diaries were either done by one person within the households or were shared by at least two family members. Participant's in each household took part in photo elicitation interviews and wrote up their medication use in the diaries provided. Each interview took on average 50 minutes. Photographs of the medications, their storage areas and anything of interest including household photos were taken. Photos were uploaded and viewed on the participants' computers.

Photos and maps were used to further explore the meaning of the term medications and what that meant to them. Photo elicitation helped to clarify data (Klitzing, 2004) and capture and visualise what may seem unclear (Mitchell, et al., 2005) such as those mundane events which occur in our daily lives that we take for granted (Radley & Taylor, 2003). Photo elicitation is not only about making photographs of people, objects or places, rather it transcends to providing information, feelings, memories and uniqueness particular to the photograph's representation (Harper, 2002).

In the final stage, exit interviews were conducted. Participants reflected on the research and were asked to give any other comments which they thought may not have been discussed in the original interviews. In some cases whenever there was any contact between researcher and participants, notes were taken reflecting the nature of the discussion and whether there were any issues that needed to be attended to.

Data Analysis

A thematic analysis method was used in data analysis for this research. The method focused on recognising emerging themes and patterns from a qualitative data set. Rather than hypothesizing or controlling the variables involved in the research, qualitative research focuses on understanding and the making of what the participants had to say (Nikora, 2007). A total of three males and four females took part in this research. The analysis procedure involved a number of imperative stages including transforming, storing, coding, collating, determining and organising data.

The analysis process concentrated on exploring the social life of medications and how the medications were obtained from various sources into homes. The analysis also looked at the use, placement and what households understood by medications in their day-to-day experiences. It became clear in the study that more specific themes emerged which centred around identity, memory, caregiving and daily routines. Medications became social objects which were associated with processes of identity, home-making, and caring for other members of the families. Specific examples of the emerging themes were identified and analysed after which a draft analysis was produced for further deliberation. The data was analysed according to the ways in which medications were integrated into relationships. Under this section, the researcher looked at how medications as they were sourced from outside and brought into homes acquired the taken-for-granted status and implicated in personal histories of illness (Hodgetts, et al., 2011).

Medications became part of the networks and they brought family members together through as in most cases taking or giving medications to another, people legitimate themselves as both a person with a legitimate ailment and/or a person who cares for someone else in need (Whyte, et al., 2002).

These acts reaffirmed bonds between social actors within the home and beyond (Hodgetts, et al., 2011).

Findings

The findings from my engagements with the participants reflect how each household understood, treated and used medications in their everyday lives. The four main themes identified through the research include; the preference of biomedical over traditional medications; storage, sharing and safety of medications; availability and affordability of medications; and the influence of the media in making decisions to purchase medications.

Preference of biomedical over traditional medications

With the introduction of modern medical science, Christianity, European education and colonialism in Zimbabwe, traditional medicines were discouraged (Last & Chavunduka, 1986). However, despite this, today many Zimbabweans use both traditional and biomedical medications (Kazembe, 2007). Although all four households interviewed were in agreement in their preference for biomedical over traditional medications, having come from middle-class and urbanised backgrounds in Zimbabwe, they still used traditional medications with which they were familiar. When Joe was asked about how he would attend to a headache, he said he would first apply Panadol if he had any at home, before visiting a doctor. Joe had no access to any traditional pain relief medications for headaches that he was familiar with in New Zealand. A number of factors including affordability, accessibility and trust all influenced the families' choices over traditional medications.

Joe: I go to the doctor or if it is something minor, I go and buy the medication over the counter, say it is a headache, I know I will need pain relief so I just go and buy over the counter. I will go and get it in the supermarket. There are panadols there and I can just buy them or at the pharmacy. If I have a headache and I take panadol and there seems to be no change, there might be an underlying problem so I have to visit the doctor

I: Would you say your first point of call is to see the medical doctor?

Joe: Yes

I: As an indigenous person are you doing away with traditional beliefs, like the use of traditional medicines?

Joe: I wouldn't say I am doing away with traditional medications because back home I didn't visit traditional healers. Only when the elders would give me a few herbs and I would be treated. So my first port of call is the doctors.

The majority of Zimbabweans consult traditional health practitioners (THP) at some point in their lives (Ministry of Health and Child Welfare, n.d.) despite attempts made by early missionaries and government officials to suppress the activities of traditional healers (Last & Chavunduka, 1986). However, traditional medicines are not easy to quantify or replicate (Kazembe, 2007). Edith gave her definition of medications as follows:

Edith: Medication is any drugs, according to my understanding, that gets given to me or prescribed by a doctor for the conditions I would be requiring the medications for. But as Zimbabweans we also have our own traditional medications, which we do not have here in NZ, but back home we could definitely choose either to go to a medical doctor or a traditional doctor or even to faith healers

I: Why is there a strong influence of Western medicine over the promotion of local indigenous medicines?

Edith: I think it is because of colonisation, we got colonised by the Western people and they brought their beliefs and we ended up appreciating their beliefs and what they brought with them affected our lives in a different way and we took it abroad. In New Zealand, Māori were colonised by the British and the same with Zimbabwe, so that transition from Zimbabwe to New Zealand wasn't really a challenge because it was like moving from a home where I had the same things offered to me in terms of medicine and doctors so I didn't learn anything new. It was mainly the change of environment. It is the same in terms of medicines but with some differences and all. What I understand scientists do is that if they hear that a plant has been successful in its use by traditional people, they will go and develop that plant so that it can be used as western medicine. There is a lot of hidden stuff that we are not aware of because what we see is the tablet and we don't even know what plant they have used and so this plant may be used as traditional and Western medicines and used to cure two different people with the same element.

In the above account Edith reflects on the influence of biomedical medications over indigenous medication practices and their origins for many Zimbabweans. The preference of biomedical medications for these families reflects the processes of colonisation in Zimbabwe. Although the majority of Zimbabweans rely on traditional medications which could be obtained at no or very little cost, those with the financial means and who had access to medical insurance relied more on biomedical medications. The influence to rely on biomedical medications was based mostly on the scientific proof that the substances and services offered. Edith was very precise on where she would go for her medications given a choice between biomedical and traditional practitioners:

Edith: I trust more the medication given to me by the doctor.

I: So you would have more faith in the Western medication?

Edith: Yes because that is something that I have grown up knowing that it is there. I trust it more than the new things that I have heard of. The doctors offer services that have been proved scientifically unlike our traditional medications that some people use.

The four Zimbabwean households felt that biomedical medications were preferred as they were scientifically proven and the use of modern technology in their manufacture made them safer. Without doubt, the households were not sure how safe traditional medications were for their health. Although they have used and continue using a few traditional medications in their homes, they preferred biomedical medications which they considered to be safe for consumption. Little faith and trust were expressed on those who supplied traditional medications. Safety was at the centre of choosing between the two types of medications which could be accessed.

Storage, sharing and safety of medications

Medications, once they were taken into homes were safely consumed and stored in safe places. However where medications were stored differed from one household to the next. Preferences of where to store medications were influenced by many factors including their accessibility and security.

Ann kept her medications in the kitchen pantry because they were easily accessible and because whenever she is in the kitchen she is always reminded to take them. She does the cooking and prepares her food there. Placement of medications in certain areas was done for easy remembrance of these medications once they were needed. Therefore to Ann that was the best place she could think of:

I put them in there to remind myself that I have to take my medications. They are easily reachable so that if anyone is sick they can reach them. I don't keep medications in the pantry because the geyser is in the pantry. It is hot in the pantry and can alter the medication because of the heat. Also the kitchen cupboard is a cooler place and that is what the medication instructions say, to be stored in a cool place. If I keep the medications in the bedroom I might forget to take them.

I: Seeing that your son is still young, is there no danger that he might one day be tempted to open the cupboard and might want to taste the medications?

Ann: I haven't noticed any of those because I always tell them the dangers of overdosing or taking medications which they are not supposed to take. So far they are really good on medications and do not take what they are not supposed to.

Ann's family is conscious of the dangers that could be posed by overdosing on medications. Children were more at risk and Ann thought it was necessary that they understood the need for them to keep away from these medications. Ann showed care for their children's safety and was aware of the consequences that could result from taking medications which were not meant for them.

Sharing of medications within families appeared to take place only for illnesses which did not require doctors' prescriptions. Panadol and paracetamol as well as traditional medications were found to be common medications that were shared among family members. In this case, sharing of medications allowed people to demonstrate care for one another and to tackle the issue of sickness as a unit. Medications that were obtained over the counter were shared within households. However, for those medications like antibiotics which were prescribed for a particular individual, there was no sharing that took place. In cases where family members suffered from the same ailment, it was pointed out that those members consulted doctors who would prescribe either the same or different medications. Themba summarised it all as follows:

Unless it's been advised by the doctor. Medications like paracetamol or Panadol which are just plain painkillers yes, but not specific medications. After assessing you the doctor gives you maybe an antibiotic. It doesn't mean that if I have say, tonsillitis, and the doctor gives me a particular antibiotic and my wife contracts tonsillitis and she also goes to consult a doctor, it doesn't necessarily mean she'll get the same antibiotic that I was given. So for that reason, wisdom will tell us no, you go and get your own. Chances are you might be given the same, chances are you will get it in different doses, so we don't share, we don't unless it's over the counter medication like paracetamol where you just walk in and buy it.

Edith: No one in my family has the same condition that I have, so I wouldn't share the medications because my condition is specific, so it is definitely a no. My son has his own specified medications, he wouldn't share with anyone as well. But possibly the over the counter medications, can be used by anybody for the minor ailments.

All households were conscious of the need to adhere to a medical professional's advice when taking prescribed medications in order to ensure each family members safety. Medications that were obtained over the counter were considered safe to share. Through sharing certain medications social relationships among the Zimbabwean households were sustained and nurtured.

Unfortunately, most of the commonplace traditional medications which the families would be able to use to cure mild ailments were not available in New Zealand. Although the families did not have access to traditional medicines they still maintained common cultural practices that they still shared in and carried out within their homes. Zimbabwean meals, for example, were shared and family members had time together. The traditional roles and respect for each family member were depicted in a family photograph.

Joe and his son Tim were in the picture seated on a couch, whereas the mother Ann and her daughter Rungano, who is older than Tim, are seen seated on the floor. Although Tim is the youngest member of the family, traditionally he represented his father in many matters related to the family, which is why he is seated higher than female family members. Language was another important aspect of the traditional values that the family brought across from Zimbabwe. Rugare family still respected their Shona language and its cultural values. The family communicates in its own language despite having moved to another country and like the other Zimbabwean families; all the participants still maintain cultural practices from home.

Availability and affordability of medications

Participants proposed that availability of medications in New Zealand was by far an improvement on the situation in Zimbabwe. Both over the counter and prescribed medications were not easily obtainable in Zimbabwe. Costs were very prohibitive for those who depended on biomedical medications like the four households who took part in this research. The Moyo family felt that availability and affordability of medications in New Zealand made life easier when compared with Zimbabwe.

Edith shared the same sentiments that medications in New Zealand were far more affordable as compared to her native Zimbabwe.

I think medication here is very cheap because of the government subsidy, each prescription costing \$3. Consultation fees are also cheap here.

I: I want to bring back your country Zimbabwe again. Have you noticed any differences between medical practices that we have here in NZ and the way medication was practiced in Zimbabwe, in terms of cost and availability

Joe: In Zimbabwe, I think it is a political thing because when I was growing up everything was available; doctors and nurses were there and pharmacies were fully stocked. But with time when things started to go bad, medication wasn't readily available on the shelf and in the pharmacy.

Ann: The other issue is that medication is expensive in Zimbabwe because of the dollar issue and some people cannot afford to buy them. Even if you go to the public hospital they might not have certain drugs because they are expensive for those public hospitals to have medicines in stock. So at times you will find that you might not get the medications because of that. And if you compare with NZ, I think the medications are always available. Medications in New Zealand are subsidised so anyone can buy the medications unlike in Zimbabwe where they are not subsidised and it's expensive and they cannot afford most of the medications.

I: Is that why the majority of Zimbabweans rely more on traditional medicines?

Joe: Yes, it could be an issue again because they might say, I will go to a traditional healer and maybe will pay a certain amount which is cheaper than resort to that. Unlike if they go to a public hospital where they will say that you are supposed to have this injection but they don't have it in stock and then you go to a private hospital which is more expensive but they might have the medications in stock. But because you don't have the money to pay for that one, it will be an issue again. So sometimes, they will prefer to go to the traditional doctor because of this.

Choosing between modern and traditional medications depends on a number of factors which include the cost of each type of treatment, accessibility, and knowledge of the probable effects of each kind of treatment (Kazembe, 2007). Cost was an issue which made a significant difference to participants' decision-making process. As said above, in New Zealand medications were reportedly cheaper and easily available and that encouraged people to consult doctors and pharmacists. The standard of one's health was seen to be guaranteed to be of higher quality. Due to the fact that there were no known traditional practitioners of Zimbabwean medications, the only available choice for the households was to consult biomedically trained doctors.

Influence of the media in making decisions to purchase medications

Media messages about medical products, risks and uses are also engaged in the home as a primary locale for audiencing (Morley, 2000). Media messages found their way into homes of those who participated in the study. In New Zealand, where unlike most OECD countries, direct-to-consumer advertising of prescription medicines is permitted, this was not the case in Zimbabwe. In New

Zealand people can access medications adverts on the radio, television, internet or magazines, the Zimbabwean law does not allow advertising of any type of medications including traditional medicines.

The media played a role in the Moyo household in making decisions about obtaining their medications. The family at time access the internet for some of the ailments and would get information about them before going out to consult a doctor or purchase medications from the pharmacy or supermarket. However, with the Gumbo and Rugare families, the story was different. The families believed that adverts that appeared in the media had little or no influence in how they went about obtaining their medications. Edith reflects on the media's role in her decision making process:

I: You have at one time or another come across some medical adverts on tv or the internet. How do you feel about being asked to have a critical look at this product, that this is the best product, go to your nearest pharmacy tomorrow and get your medications? What's your take on that?

Edith: Well I usually change channels whenever an advert comes on or I simply do other things at that time when the advert is on because...I know they think that viewers are gullible and that viewers can be made to believe that things on the tv are the right things to do. The difference is I know what I want and if I go to the doctors I will be given a better product. Because those are drug companies advertising their products, possibly a product that is not selling well at the pharmacy and they are trying to find more buyers. My first point of call is the doctors and if it is just a minor element I will go to the pharmacy and talk to the pharmacist and tell him what my problem is. I will ask for the best product for that problem and at times the pharmacist may not be able to help me and tells me go to the doctors. I won't buy anything because it is on tv.

I: New Zealand is one of the few countries throughout the world which allows the advertisement of medical products. What would you say are some of the other differences with Zimbabwean culture?

Edith: Well in Zimbabwe, most adverts were on billboards, which is one difference with New Zealand. Zimbabwe did have some advertisements on tv on medications and on the radio but they were not that many.

Joe and Ann also felt that advertisements had no influence in deciding what medications to take in their day to day lives:

Anne: As for me I don't trust medications that are advertised because I sometimes think that they are under research so if I use them I would be one of those people who are under research and they see how the medications works. So mostly I don't go for advertised medications. Even if someone comes and says ok this medication is good and it helps this and that, I am not interested.

Joe: Adverts don't personally sway me from my own thinking. If I am satisfied with say paracetomal, I do not have to change because there is now a new product on the market (panadol). And if you visit a doctor he doesn't give you that type of medication which is being advertised, you are prescribed an old one which used to be there and you wonder why they advertise when the product is not there in the pharmacy. For example Colgate, they advertise like they have new herbal...but it is still Colgate, when I go in the shop all I look for is Colgate.

Although media is an important source of information about health and medication, and where we could source our medication needs, there is great concern about the quality of medical reporting in newspapers, televisions, magazines and internet (Moyniham, et al., 1999). There is much concern

over the way information about medical treatments and technologies is framed in the news reports with some of the information misleading the audience (Moynihan et al., 1999). Temba did not believe in buying medications which were advertised through the media. As for non-prescribed medications, Themba did not mind although he pointed out that he paid less attention to any adverts on medications because some of the information was misleading:

I pay less attention to anything the media tells me. If anything my doctor would have a say in what he wants me to buy. Maybe the adverts are meant for others but certainly not me. Maybe because we did not have many adverts on medicines on television back home I don't know.

Zimbabweans have had little exposure to media advertising of medications. In Zimbabwe, the internet was limited to a few people and the local television station did not allow any adverts with content alluding to medications. Ethically and traditionally, indigenous medications cannot be advertised as they were never intended for profit or mass manufacture. The traditional medications were not to be commercialised as they were made to be available for anyone who was ill.

Discussion and conclusions

Medications are used to treat infectious diseases and manage symptoms of chronic disease. They give hope to those who are physically in need of them. At the same time medications can help relieve pain and suffering (Hughes & Blegen, 2008). Medications take on important meanings for users at home, enabling people to respond to illness and engage in the management of health (Hodgetts, et al., 2011). Medications at the same time bring family members together by caring for each other particularly the sick. The use of either biomedical or traditional medications are increasing and are commonly understood as a meaningful way of achieving personal treatment objectives in daily living (Leontowitsch, et al., 2010).

Very little, however, is known about the emplacement and use of medications in domestic spaces (Conradson, 2003), this research emphasises understandings and social practices of medications in everyday life for Zimbabwean households in New Zealand. Managing medications demonstrated the ability of each family to empower their health experiences. The process enabled and allowed them to gain control over the way they administered, used, stored, related, shared and obtained information on the various medications they took. It was necessary to find out what medications meant to the four households who took part in this study to gain an understanding of the environments under which medications were taken, how routines were formed and maintained. The storage and sourcing of these medications and the relationships within the care environments that is the home were central elements of this study. Medication practices take place within an array of networks and practices of everyday life, through which people go about managing illness and their relationships with others (Hodgetts, et al., 2011). Through taking or giving others medications, people demonstrate care for either themselves or for others who are not well (Whyte, et al., 2002).

The four households which participated in this research viewed medications from two perspectives. Firstly, medications were viewed from a traditional or indigenous perspective and secondly from a biomedical point of view. Interestingly, no research has been done in New Zealand to explore the everyday experiences and uses of medications in Zimbabwean households as a new migrant group. This research therefore documents how medications are embedded in complex cultural, familial, social and health care relations within the four households that participated in the study. The participants had access to biomedical medications in Zimbabwe due to their social and economic class which enabled them to be a part of a medical aid association. Although participants preferred using mostly biomedical medications in their day to day lives, these biomedical substances became cultural objects through their use and exchange among family and community members. Medications whether they were biomedical or traditional, are tangible and usable in concrete ways (Geest, et al., 1996).

Another interesting issue worth taking note of was that biomedical medications were reportedly cheaper in New Zealand compared with Zimbabwe. A prescription that costs \$3.00 in New Zealand was found to be over US\$200.00 in Zimbabwe. This enabled the participants to fully rely on biomedical medications in New Zealand given greater accessibility and affordability. Medications and medical health care systems are reported to be far more expensive in developing countries as opposed to OECD countries like New Zealand. Such cultural differences warrant further research to assess the experiences of migrant groups accessing medications in New Zealand.

In this study, the home played an important role for maintaining each family's health as it was the main place where medications were administered. All medications that were obtained from various sources found themselves into homes where they were either administered or consumed. The home was a particularly significant place for medication storage and use (Sorensen, et al., 2006). Beside the home being a place in which people dwell, it was also related to personal identity, security, privacy, respite, trust, routine and care (Mallett, 2004). The home becomes a social organisation in which everyday practices, including the use of medications, are enabled and enacted (Saunders & Williams, 1988).

References

- Almasi, E., Stafford, R., Kravitz, R., & Mansfield, P. (2006). What are the public health effects of direct-to-consumer drug advertising? *PLoS Medicine*, 3(3), 145.
- Ang, I. (1996). *Living room wars: Rethinking media audiences for a postmodern world*. New York: Routledge.
- Applbaum, K. (2006). Pharmaceutical marketing and the invention of the medical consumer. *PLoS Medicine*, 3(4): e189.
- Balakrishnan, K., Tordoff, J., Norris, P., & Reith, D. (2006). Establishing a baseline for the monitoring of medicines availability for children in the UK: 1998 to 2002. *British Journal of Clinical Pharmacology*, 63, 85–91.
- Chamberlain, K. (2004). Food and health: Expanding the agenda for health psychology. *Journal of Health Psychology*, 9, 467–481.
- Chenga, M. (1986). Rural housing programmes in Zimbabwe: A contribution for social development. *Journal of Social Development in Africa*, 1, 43–47.
- Conn, K. M., Halterman, J. S., Lynch, K., & Cabana, M. D. (2007). The impact of parents' medication beliefs on asthma management. *Pediatrics*, 120(3), 521–526.
- Conrad, P. (1985). The meaning of medication: Another look at compliance. *Social Science and Medicine*, 20(1), 29–37.
- Conradson, D. (2003). Spaces for care in the city: The place of a community drop-in centre. *Social and Cultural Geography* 4, 507–525.
- Crellin, J. K. (2004). *A social history of medicines in the 20th century: To be taken three times a day*. New York : Routledge.
- Dyck, I., Kontos, P., Angus, J., & McKeever, P. (2005). The home as a site for long-term care: Meanings and management of bodies and spaces. *Health & Place*, 11, 173–185.
- Easthope, H. (2004). A place called home. *Housing, Theory and Society*, 21, 128–138.

- Gesler, W. (1992). Therapeutic landscapes: Medical issues in light of the new cultural geography. *Social Science and Medicine*, 34, 735–746.
- Gieryn, T. (2000). A space for place in sociology. *Annual Review of Sociology*, 26, 463–496.
- Gleeson, B. & Kearns, R. A. (2001). Remoralizing landscapes of care. *Environment and Planning D: Society and Space* 19, 61–80.
- Hanson, G. R., Venturelli, P. J., & Fleckenstein, A.E. (Eds.). (2006). *Drugs and Society*. Sudbury, MA: Jones & Bartlett Learning.
- Heath, I. (2006). Combating disease-mongering: Daunting but nonetheless essential. *PloS Medecine*, 3, 448–451.
- Henderson, S., & Petersen, A. (Eds.) (2002). *Consuming health*. London: Routledge.
- Hodgetts, D., Chamberlain, K., Gabe, J., Dew, K., Radley, A., Madden, H., Norris, P., & Nikora, L.W. (2011). Emplacement and everyday use of medications in domestic dwellings, *Health & Place*, 17, 353–360
- Hughes, R. G., & Blegen, M. A. (2008). *Patient safety and quality: An evidence-based handbook for nurses*. USA: Agency for Healthcare Research and Quality, U.S. Dept. of Health and Human Services. Retrieved from <http://www.ahrq.gov>
- Johnson, J., & Bootman, J. (1995). Drug-related morbidity and mortality: A cost of illness model. *Archives of Internal Medicine*, 155, 1949–1956.
- Kazembe, T. (2007). Traditional medicine in Zimbabwe. *The Rose+Croix Journal*, 4, 55–72.
- Last, M. & Chavunduka, G. (1986). *Professionalisation of African medicine*. Manchester, UK: Manchester University Press.
- Leontowitsch, M., Higgs, P., Stevenson, F., & Jones, I. (2010). Taking care of yourself in later life: a qualitative study into the use of non-prescription medicines by people aged 60+. *Health* 14, 213–231.
- Lisby, M., Nielsen, L., & Mainz, J. (2005). Errors in the medication process: Frequency, type and potential. *International Journal for Quality in Health Care*, 17, 15–22.
- Mallett, S. (2004). Understanding home: a critical review of the literature. *Sociological Review*, 52, 62–89.
- Mcdonnell, P. & Jacobs, M. (2002). Hospital admissions resulting from preventable adverse drug reactions. *Annals of Pharmacotherapy*, 36, 1331–1336.
- Milligan, C., Bingley, A., & Gatrell, A. (2005). Digging deep: using diary techniques to explore the place of health and well-being amongst older people. *Social Science & Medicine*, 61 (9), 1882–1892.
- Ministry of Health. (2006). *Maori health chart book*. Wellington: Ministry of Health.
- Ministry of Health and Child Welfare (n.d.). *The National Health Strategy for Zimbabwe (2009 – 2013)*. Zimbabwe, Southern Africa: Author.
- Morley, D. (2000). *Home territories: Media, mobility and identity*. London: Routledge.

- Moynihan, R., Bero, L., Ross-Degnan, D., Henry, D., Lee, K., Watkins, J., & Soumerai, S. (1999). *Media coverage of medicines: good information or misleading hype?* Retrieved from <http://gateway.nlm.nih.gov>
- National Prescribing Service Limited (2009). *Medication safety in the community: A review of the literature*. Retrieved from <http://www.nps.org.au>
- Nikora L. W. (2007). *Maori social identities in New Zealand and Hawaii*. Unpublished doctoral thesis, University of Waikato, Hamilton, New Zealand.
- PHARMAC (2007). *PHARMAC Annual Review 2006*. Wellington: PHARMAC.
- Sorensen, L., Stokes, J., Purdie, D., Woodward, M., & Roberts, M. (2005). Medication management at home: Medication-related risk factors associated with poor health outcomes. *Age and Ageing*, 34, 626–632.
- Prescription monitoring program. (2006). *Safety tips: avoiding medical errors*. Retrieved from <http://www.ct.gov>
- Preston, J.D., Preston, J., O'Neal, J.H., & Talaga, M.C. (2010). *Handbook of Clinical Psychopharmacology for Therapists* (6th ed.). USA: New Harbringer Publications.
- Saunders, P., & Williams, P. (1988). The constitution of the home: towards a research agenda. *Housing Studies* 3, 81–93.
- Shumaker, S.A., Ockene, J. K., & Riekert. K. A. (2009). *The handbook of health behaviour change*. New York: Springer Publishing Company.
- Sorensen, L., Stokes, J., Purdie, D., Woodward, M., & Roberts, M. (2006). Medication management at home: medication risk factor prevalence and inter-relationships. *Journal of Clinical Pharmacy and Therapeutics* 31, 485–491.
- Toop, L., Richards, D., Dowell, T., Tilyard, M., Fraser, T., & Arroll, B. (2003). *Direct to consumer advertising of prescription drugs in New Zealand: For health or for profit?* Christchurch: Christchurch School of Medicine & Health Sciences, University of Otago.
- Triggle, P. J. (2005). Vaccines, viagra, and vioxx: Medicines, markets, and money – when life-saving meets life-style. *Drug Development Research*, 64, 90–98.
- United Nations. (2008). *World population prospects: The 2008 revision*. Retrieved 17 January 2011 from <http://www.un.org/>
- van der Geest, S., & Hardon, A. (2006). Social and cultural efficacies of medicines: Complications for antiretroviral therapy. *Journal of Ethnobiology and Ethnomedicine*, 2(48), 1746–4269.
- Whyte, S. R., van der Geest, S., & Hardon, A. (2002). *Social lives of medicines*. Cambridge, UK: Cambridge University Press.
- Winterstein, A., Thomas, E., Rosenberg, E., Hatton, R., Gozalez-Rothi, R., & Kanjanarat P. (2004). Nature and causes of clinically significant medication errors in a tertiary care hospital. *American Journal of Health-System Pharmacy*, 61, 1908–1916.
- World Health Organisation (2007). *Promoting safety of medicines for children*. Retrieved from <http://www.who.int>
- Zed, P. J. (2005). Drug-related visits to the emergency department. *Journal of Pharmacy Practice*, 18, 329–335.

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