



Bridging gaps in health care and healing: Traditional medicine and the biomedical health care sector in Zanzibar

Final project report by:

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List of abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ARV	Anti-Retroviral drug
HIV	Human Immunodeficiency Virus
JUTIJAZA	Jumuia ya Utafiti na Tiba Asilia
MMH	Mnazi Mmoja Hospital
MOH&SW	Ministry of Health and Social Welfare
PHCC	Primary Health Care Centre
PHCU	Primary Health Care Unit
TAUMAZA	Jumuia Tiba Asilia NGO Taumaza
TB	Tuberculosis
TBA	Traditional Birth Attendant
Tsh	Tanzanian Shilling
TC	Traditional Council
TU	Traditional Unit
WHO	World Health Organisation
ZFDB	Zanzibar Food and Drug Board

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Government representatives, biomedical doctors, and most healers have consented to being quoted using their actual names; if no consent to the identification of names was given, the interviewees' names are not provided. All patients' names have been anonymised.

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Berlin, October 2012

1. Introduction

“Collaboration between traditional healers and biomedical practitioners in African countries south of the Sahara is ever more important now in improving healthcare because it is likely to widen the scope of sharing and collecting information and allows for shared leadership (...) and responsibility in the management of health problems.” (Kayombo et al., 2007:3)

Traditional healers and their role within health care systems in Sub-Saharan Africa have been acknowledged for many decades. Throughout Sub-Saharan Africa, traditional healers are often the most accessible source of medical care, particularly in rural areas where access to biomedical care is often limited (Van der Geest, 1997; Mhame, 2000; Mbwambo et al., 2007). Independent of costs and distances, socio-economic or educational strata, many African citizens consult healers in preference to or in conjunction with biomedical doctors (Bruchhausen, 2002:157; Makundi et al., 2006). The World Health Organisation (WHO) estimates that eighty percent of Africans have sought out traditional medicine as a critical aspect of their health seeking behaviour at least once in their lives (WHO, 2000; Bodeker, 2001). The use of traditional medicine has also received renewed attention due to epidemics such as HIV/AIDS, malaria, and tuberculosis (Matthies, 1998; Ernst, 2003; Liverpool et al., 2004; Nsimba and Kayombo, 2008:319).

Basic challenges of collaboration

Following the recognition of traditional medicine as the main – and often sole – source of health care in many parts of the developing world, the WHO has repeatedly urged its member states to foster collaboration between the traditional and biomedical health care systems (WHO, 1991, 2001, 2002a+b; Romero-Daza, 2002:174). During the last decades, traditional medicine policies have increasingly been adopted in most of the member states of the WHO (including Tanzania) in order to accommodate collaboration between traditional and biomedical health practitioners (Akerle, 1991; UNAIDS, 2006, 2000; Kayombo et al., 2012:1; Langwick,

2011:58). Efforts to recognise and foster the use of traditional medicine, however, have been hampered by mutual distrust as well as by the difficulties in regulating such practices in many African countries (Mbwambo et al., 2007). The key challenge is to initiate collaboration between two comprehensive health systems that differ strongly in terms of theory of disease causation and the management of health problems:

(1) Biomedicine tends to understand disease as “a form of biological malfunctioning, with ill-health manifesting in chemical, anatomical or physiological changes” (Ross, 2008:16). Treatment is here considered as “the scientific process of treating disease through appropriate medical, surgical, and chemical interventions” (ibid). Pathological processes are identified through blood tests, X-rays, scans, and other investigations, usually carried out in laboratories or clinics (Kayombo et al., 2007:5). The broad model of biomedicine is thus a disease focused approach, which is mainly directed towards discovering and quantifying physico-chemical information about the patient, rather than less measurable (social and emotional) factors. Through its evidence-based approach – involving rigorous trial designs sustained by strict scientific protocols – biomedicine claims to be universally valid (Hahn and Kleinman, 1983:305; Lock and Nguyen, 2011).

(2) In contrast, traditional medicine refers to health practices, knowledge, and beliefs incorporating plant/animal/mineral-based medicines, spiritual therapies, and manual techniques and exercises, applied to treat, diagnose, and prevent illnesses or maintain well-being (Feierman, 1985:110; Luedke and West, 2006:4). Traditional medicine does not regard human health as a purely physical entity but takes into consideration patients’ social and cultural environment, whether living (family, community), passed away (ancestors), or the intangible forces of the universe (spirits, God/Gods). Traditional forms of healing are attractive to people because of their holistic approach to health. Traditional healers are expected to take a personal interest in their client’s social situation and to let the patient’s input guide their diagnosis over repeated consultations (Gessler et al., 1995:146; Green, 2000:413; Kirmayer, 2004; Bruchhausen, 2004).

Traditional medicine in Zanzibar

The majority of the population in Zanzibar uses traditional medicine for the treatment of various diseases (Zanzibar Traditional and Alternative Medicine Policy Act, 2008:1; Larson, 2008). Since colonial times, the traditional and biomedical health care systems have been operating in ‘parallel circles.’ Reasons for the continued separation at the institutional level are the lack of a common language and/or attitudinal conflicts between traditional healers (*waganga wa asili*) and biomedical practitioners (*waganga wa kisasa*). Furthermore, traditional medicine (*dawa ya asili*) has lacked government support and backing through policies and legal frameworks. Over the last years, however, several events have created an environment fostering collaboration between traditional healers and biomedical doctors:

- In 2008, the Ministry of Health (MoH) of Zanzibar announced a policy aimed at coordinating the activities of healers and developing traditional medicine in the private and public health sectors. This policy is expected to guide the contribution of traditional healers and to assure regulation and strict supervision in order to prevent malpractice.
 - In 2009, the Zanzibarian government established a Traditional Unit (*Bazara la Tiba Asili*) (TU) as part of the MoH in order to register, monitor, and control traditional healers’ practices.
 - Since 2005, Dr. Tanja Nienstedt, one of the founders of the NGO ‘Medici dell’ Alto Adige per il Terzo Mondo’ (internationally referred to as World Doctors) initiated a dialogue between a few doctors and healers. This dialogue was supposed to create awareness among doctors, representatives of the MoH, and healers about the potential opportunities for health care provision that could be tapped through collaboration. This dialogue was highly appreciated by MoH representatives.
 - In 2011, World Doctors financed three training workshops to assist traditional healers in performing their activities in accordance with governmental legislation. This training was facilitated by members of the TU and consisted of sessions in which healers were informed about the new Zanzibar Traditional and Alternative Medicine Policy Act, the registration process they are expected to undergo, and ethics/codes of conduct.
- In 2011/2012, a collaborative research project was carried out by World Doctors, the Institute of Social and Cultural Anthropology at the Freie Universität Berlin, and the MoH of Zanzibar. This research project assumed that there is a strong need to create a platform for collaboration between traditional healers, biomedical doctors, and government representatives. One of its goals was to understand patients’ health-related behaviour in order to supplement and promote better health care for patients in line with the national vision of the Zanzibarian MoH. The study also assumed that (inter-)cultural competence is important in health-related development work. Thus, a medical anthropological approach was chosen, as it was anticipated that this would lead to a better understanding of the contribution of traditional medicine in Zanzibar, which is needed for the planning of future projects to improve health care. In summary, the project focused on:
 - (1) The current situation of traditional healers in Zanzibar (e.g., their legal position, guidelines for medical practice, healing/prevention methods);
 - (2) The composition and limitations of the public health sector with regard to the delivery of health care;
 - (3) Patients’ health seeking behaviour (e.g., motivations to consult healers/doctors, experiences with both systems);¹
 - (4) Attitudes of doctors towards the practices of healers and *vice versa*;
 - (5) Expectations of collaboration regarding the provision of health care (from the viewpoint of doctors, healers, MoH representatives, and patients);
 - (6) Awareness of the new Policy Act among the different groups.

Two aspects have played a crucial role in the recent changes within the traditional health care sector – and thus, for the procedure and outcome of this research project:

¹ These questions focused on the most urgent health problems in Zanzibar, such as tuberculosis (TB), HIV/AIDS, diarrhoea, pregnancy- and childbirth-related conditions, diabetes, malaria, cardiovascular disease, and cancer (Zanzibar Health Sector Reform 2006-2011: Ministry of Health and Social Welfare. Strategic Plan II).

- The role of the TU;
- Training sessions for traditional healers (initiated by World Doctors).

The TU is currently in charge of monitoring traditional healers, and guiding, regulating, and controlling their activities in the traditional health care sector in Zanzibar. These training sessions for traditional healers – observed as part of the research project in 2011/12 – provided us with an insight into current discussions, challenges, and ideas of how to establish and/or reinforce dialogue between healers and government representatives. Both the role of the TU as well as the discussions during training sessions are reflected in the findings of this report.

In what follows, an overview on the research methodology is given. Thereafter, the report presents findings on the biomedical and traditional health sectors in Zanzibar, as well as the views and experiences of their representatives. The third section explores aspects of patients' health seeking behaviour with regard to biomedical and traditional treatment. The project report concludes with a summary of the gaps and challenges that currently exist in and between both health care systems, and provides an outlook for future steps that could be taken to foster further collaboration.

2. Research methodology



Figure 1: Map of Zanzibar

Research area

The study was conducted over a period of ten weeks from November 2011 to January 2012 on the island of Zanzibar, which is located about 40 km offshore from the Tanzanian mainland. Zanzibar – part of the United Republic of Tanzania, but a semi-autonomous region since 1964 – elects and maintains its own government, which is directly responsible for all non-union affairs, including health services (The Revolutionary Government of Zanzibar, 2010).

According to the last Population and Housing Census (2002), Zanzibar has a total population of about one million people, with an annual growth rate of 3.1%. Zanzibar's population is divided between two main islands – Unguja and Pemba – and a number of smaller islets. Unguja is said to have a population of about 650,000 inhabitants; Pemba has about 350,000. Zanzibar Town (with about 200,000 inhabitants) is situated on Unguja (all figures: The United Republic of Tanzania 2002a). Due to migration, the population is likely to have increased since the last census (Larson, 2008:39).

The Household Budget Survey data of 2004/2005 show that forty-nine percent of the population in Zanzibar had an income below the poverty line. The preliminary analysis of the 2009/2010 Household Budget Survey data indicate that this percentage declined marginally to thirty-eight percent in 2009, the same year in which Zanzibar's per capita annual income was estimated at 557 US\$ (The Revolutionary Government of Zanzibar, 2010).

After about three centuries of integration, Zanzibar has a population with wide socio-economic and ethnic diversity (Giles, 1999:145; Parkin, 2006:699). The variety of nationalities in Zanzibar is striking: Arabs from Oman (*Wamanga*), Asians (*Wahindi*), Africans (*Waswahili*), citizens originating from Yemen (*Washihiri*), descendants of early immigrants from Persia (*Washirazi*) or Comoros Island, indigenous Zanzibari (*Wahadimu*), and people from the island Tumbatu (*Watumbatu*) form a plural society (Larson, 2008:26ff).

Swahili is the principal spoken language; the population of both islands, Unguja and Pemba, are almost entirely Muslim (Parkin, 2006:698).

Research sites

The study took place at various sites:

- The TU of the MoH (Majestic area);
- Traditional healers' training sessions (in Unguja/Jimkama and Pemba/Chake Chake);
- Traditional clinics (called Herbal Islamic Hospital, Mwasele herbalist clinic, Zanzibar traditional healers clinic, Babu Madawa);
- Government hospitals (called Mnazi Mmoja hospital, Kwamtipura hospital, Raha Leo hospital);
- Private hospitals (called Al-Rahma hospital, Mari Stopes Tanzania).

Target groups of the research and recruitment of participants

The main target groups of the study were patients, traditional healers, biomedical doctors, MoH representatives, and members of the TU. In addition, one interview was conducted with a representative of the Zanzibar AIDS Commission. Staff members of the Ivo de Carneri Public Health Laboratory on Pemba Island were also interviewed. All participants were recruited via purposive and convenience sampling. Patients were recruited from public, private, and traditional clinics. Doctors were recruited from public and private clinics. The TU and leaders of traditional healers' associations facilitated contact with healers. The methods and aims of the research were orally explained to all participants in order to obtain their informed consent. Ethical approval was obtained from the Zanzibar Medical Research and Ethics Committee, ZAMREC.

Qualitative data

Qualitative data were obtained through in-depth interviews using open-ended interview guidelines, as well as semi-structured questionnaires covering the above mentioned topics.² Interviews with patients and healers were conducted in Kiswahili. Most of the interviews with doctors and MoH representatives were conducted in English. All interviews were audio recorded and transcribed afterwards, with the

² Qualitative interviews were also used to obtain information from healers, for example about their history of becoming a healer and their specialisation. Interviews with doctors included questions about their professional specialisation. Patients were asked to provide narratives about their health seeking experiences.

exception of informal conversations where notes were taken. Some interview quotations have been edited slightly to ensure a smooth flow when reading.

Participant observation was conducted in the TU, during traditional healers' training sessions, at healers' places of practice, as well as during religious or spiritual healing rituals.

Overview of qualitative interviews

Target group	Number
Patients	10 (7 female, 3 male)
Healers	13 (5 female, 8 male)
Doctors/MoH representatives	13 (4 female, 9 male)

Type of healers	Number
Traditional birth attendants (TBAs)	2
Herbalists	3
Healers performing herbal and spiritual medicine	4
Healers performing <i>only</i> spiritual rituals	1
Healers working with herbal and Islamic medicine	3
Eight out of thirteen healers declared themselves as working full-time as healers, while five had other sources of income, as: farmer (2), guard, vendor of electrical items, and soldier	

Type of doctors	Number
Pathologist	1
Paediatrician	1
Otorhinolaryngologist	1
Diabetes specialist	1
HIV/AIDS specialist	1
TB specialist	1
Gynaecology specialist	1
GP	2
Pharmacist	1
Chemist	1

Quantitative data

Quantitative data were collected using questionnaires with one hundred patients (64 female, 36 male). The questionnaires gathered socio-demographic information of respondents (gender, age, marital status, place of birth/residence, educational background, occupation, and religion). The main sections covered questions regarding biomedicine/traditional medicine (usage, causes of treatment and/or treatment interruption, payment, cross-referral, classifications, and judgements). A final section asked for patients' attitudes towards collaboration between healers and doctors.

A team of five researchers was involved in the (qualitative and quantitative) data collection (Caroline Meier zu Biesen, Said Yussuf Said, Haji Ameir Bonde, Mohammed Simba, and Hidaya Hamad Juma).

Data analysis

Qualitative data were subjected to thematic content analysis, with informants' responses coded, summarised, and arranged into thematic blocks according to the issues raised in the introduction.

Quantitative data were coded and then analysed using descriptive statistics. Results are presented in the report as frequencies, percentages, and cross-tabulation in tables and graphs showing patients' behaviour in terms of health care usage. The statistical analysis was done using Mathematica 8.0 (Wolfram Research, Champaign, IL, USA). A stepwise multiple regression statistical technique was used to test the contribution of various (independent) variables, such as patients' visits to healers or hospitals, classification of diseases (e.g., 'hospital diseases,' 'healer diseases'), interruption of treatment, payment of treatment, cross-referral, judgment on the effectiveness of traditional medicine (e.g., 'useful,' 'not useful'), and ranking on collaboration preferences (dependent variables).

Dr. Jonathan Shock (Max-Planck-Institut für Physik, München) and Victor Söderstöm (Ludwig Maximilian-Universität München, medizinische Fakultät) conducted the statistical analysis.

3. Zanzibar's biomedical health care sector

3.1. Public health facilities

Zanzibar's public health sector is based on a network of 105 first and twenty-six second line Primary Health Care Units (PHCUs) in both urban and rural areas (Zanzibar Health Sector Reform, 2006-2011:19). These refer to four thirty-bed Primary Health Care Centres (PHCCs) and/or district hospitals, which are supported by the major referral point for the islands: Mnazi Mmoja Hospital (MMH), located in Zanzibar Town. MMH consists of the following wards: paediatrics, surgery, internal medicine, physiotherapy, acupuncture, occupational therapy, trauma, obstetrics and gynaecology, maternity services, and dental and eye care.

PHCUs

With an estimated catchment population of up to 5,000, first line PHCUs provide basic outpatient services, maternal and child health services, family planning and youth services, health education and counselling, as well as environmental health services. Second line PHCUs offer a similar service with the addition of facility-based maternal delivery services, and basic laboratory and dental services (Zanzibar Health Sector Reform, 2006-2011:20).

PHCCs

Zanzibar's four PHCCs provide basic inpatient care in areas far from other hospital facilities. Their services include inpatient medical and surgical capacity, emergency obstetric care, ambulance services, and psychiatric assessment.

Hospitals

Zanzibar has a total of four public hospitals and two specialised hospitals. The specialised hospitals are a maternity home (34 beds) and a psychiatric hospital (110 beds), both of which are on Unguja and fall under the management of MMH. Three district hospitals are located on Pemba (with 80-120 beds). MMH has a capacity of 400 beds. In order to reduce congestion in the hospitals, Zanzibar's

health officials eagerly try to distribute patients among the different PHCCs. In addition, a structural extension of the MMH building is planned.³

Dispensaries

Unguja has eighty-three dispensaries, Pemba has thirteen. They dispense medications and medical supplies as per prescription or order forms.

Private health facilities

Unguja covers health care in three private hospitals, fifty-three private pharmacies, and one hundred over the counter stores; on Pemba there are six private pharmacies and 103 over the counter stores (Zanzibar Health Sector Reform, 2006-2011:19). Although considerable efforts have been made to improve access to health services in Zanzibar, chronic shortages of drugs, medical equipment, as well as qualified employees/health professionals, combined with a range of institutional constraints on health service provision, impede access to biomedical treatment (Zanzibar Health Sector Reform, 2006-2011).⁴

The role of traditional medicine

Traditional medicine is not part of Zanzibar's biomedical health care system. Nevertheless, biomedical practitioners are aware of its popularity among and frequent use by patients. The following section illustrates doctors' statements during interviews regarding their knowledge, attitudes, and views on the traditional medicine sector, as well as their opinions about a potential working collaboration with traditional healers. This is followed by a case study on diabetes to illustrate how shortages of diabetic medicines in public hospitals may influence patients' decision to switch to the traditional health care sector.

3.2. Biomedical doctors' views: knowledge of and attitudes towards traditional medicine and healers

"I am myself a scientist, but I know my limits, I know my boundaries. I know where I am capable of helping a

patient, but if I am reaching the end of my knowledge, I am seeking help and advice from the books or some other doctors abroad. If I do not have any medication left for a patient, I cannot tell him that he will die, I am telling him: 'Here we reached our capability, I do not know any further, so if you seek any other advice, go on. Go and seek it, even traditional medicine'." (Dr. Akil, Al-Rahma clinic, 26.11.2011)

Fifty percent of the interviewed biomedical practitioners were aware of the new legislation for traditional medicine in Zanzibar; however, the exact content of the policy remained unclear to most. According to all of the interviewed doctors, in order for there to be a serious attempt to include traditional medicine within health planning, its effective potential would have to be scientifically proven.

Results of this study show that most of the interviewed doctors were not familiar with traditional healing practices and/or had a rather vague idea about the generic term 'traditional medicine':

"I do not believe in traditional medicine. I usually do not even ask what kind of medicine patients are using. Because [...] I do not have much knowledge [of] what kind of medicine or herbal drugs they [healers] prepare. Most of them [patients] they just take a cup of medicine, they feel some heat in the head and they think they are cured. I do not know, do healers mainly use herbal medicine or do they use witchcraft?" (Dr. Samura, MMH, 25.11.2011)

"I have no experience with traditional medicine, [...] I also do not think that traditional medicine could be useful to treat some diseases. That is the reason why I did not advise a patient to go [to a healer]." (Dr. Nayiga, MMH, 21.11.2011)

"I do not know much about it, but I am trying to ask [my patients], and sometimes they are telling me to use a prayer or herbs. This cannot harm anybody, so I say, 'Okay you can continue'." (Dr. Rehema, MMH, 21.11.2011)

"Even us, doctors, we have different approaches, but at least you know how you are treating a patient. How are we going to recognise traditional healers? I do not know anything about them." (Dr. Okafor, MMH, 25.11.2011)

"Traditional medicine is pure medicine, it does not consist of chemicals." (Dr. Kafil, Al-Rahma clinic, 26.11.2011)

³ Said Yussuf Said, TU and pharmacist MMH, 27.11.2011.

⁴ Dr. Samura, MMH, 25.11.2011; informal conversations with TU members.

A biased perception became obvious as doctors accused traditional healers of being quacks, suggested that herbal/spiritual medicine has merely a placebo – if not harmful – effect, and that overall it lacks a scientific basis and regulation. In interviews, the majority of doctors did not think of their own work as being limited nor did they see many enriching factors coming from traditional medicine. Doctors listed only selected points about traditional medical practices that they would be interested in:

- Healers' diagnostic tools
- Knowledge on (the preparation of) herbal remedies
- How healers acquire their knowledge

Doctors' appreciation of medicinal plants focused exclusively on the inherent method of drug development, with emphasis on chemical simplicity and results in important treatment options. The still developing field of analytical chemistry – with its ability to isolate and purify the active ingredients of medicinal plants – has played a fundamental role in drug research and development (Petryna and Kleinman, 2006:2; Spelman, 2009:45). Until today, medicinal plants continue to provide an important source of new drug leads (Cox, 1995; Drews, 2000; Reihling, 2008; Hsu and Harris, 2010; Meier zu Biesen, 2010; Rutert et al., 2011). This fact was frequently mentioned by biomedical practitioners in interviews – and often interpreted as one of the more positive aspects of traditional medicine. The majority, however, held the view that therapeutic replicability would be superior to traditional medicine due to the precise dosing of an isolated chemical:

“Most of our medicines have their origin in plants. [...] In traditional medicine, we have wonders! What healers are doing is exactly what we are doing now, but we are more advanced.” (Dr. Akil, Al-Rahma clinic, 26.11.2011)

“Medicine mostly comes from plants. Thus, biomedical drugs may have the same ingredients as found in plants.” (Dr. Rehema, MMH, 21.11.2011)

“Even the modern treatment is made out of medicinal plants.” (Dr. Mahbub, MoH/MMH, 22.11.2011)

“I know that medical science comes from the trees.” (Dr. Okafor, MMH, 28.11.2011)

“Pharmaceuticals are coming from herbs, even paracetamol, and there is more traditional medicine out there than drugs, but we need to conduct research on them.” (Dr. Samura, MMH, 25.11.2011)

Biomedical doctors identified challenges in terms of the risks and ethics of using traditional medicines that are not systematically documented, verified, or scientifically established. As the following excerpts show, doctors cautioned against the use of traditional healers' practices. Risk factors – such as of traditional healers not finding the correct dosage, delays in (biomedical) health seeking, and malpractice within traditional medicine – and the issue of financial profiteering from the selling of traditional medicines were central concerns expressed by doctors:

“In hospitals, we know how to treat every kind of disease, that's why we do not encourage patients to go to the healers. This is a very conservative view that we have in the hospital.” (Dr. Mahbub, MoH/MMH, 22.11.2011)

“Patients can get well [at the healer] symptomatically, but it is temporarily. [...] Sometimes, healers are just even taking the money. Even if they do not know anything.” (Dr. Rehema, MMH, 21.11.2011)

“Healers provide medication without a proper dosage and they may overdose.” (Dr. Kafil, Al-Rahma clinic, 26.11.2011)

“I do believe fully in the local medicine, I could see the impact for the pain relief. But a proper dosage is most important, risk of overdosage is there. My policy is that they [patients] should not use anything without consulting a medical doctor.” (Dr. Okafor, MMH, 28.11.2011)

“There is health seeking delay in favour of traditional medicine. [...] I can say, wherever they [healers] see a way to get clients, they are thinking of money rather than thinking of the client. Even though they know there is no cure for HIV, they might convince the clients that there is.” (Dr. Jecha, HIV Coordinator Zanzibar, 4.12.2011)

“Only a few healers are using measurements, dosages [for their products]. A lot of them exploit their patients (wengi tu wanafanya maonezi).” (Said Yussuf Said, TU and pharmacist MMH, 17.11.2011)

"Healers are not diagnosing anything. Actually they are using our terms. Hypertension, cancer, diabetes, pressure are our terms, not theirs! But healers use them without knowing what they mean...they need to go to school!" (Dr. Akil, Al-Rahma clinic, 26.11.2011)

According to doctors, traditional healers speak about 'diseases' and 'cures' in biomedical terms without sufficient biomedical understanding. During research it was observed that healers did seem to have incorporated biomedical language and techniques into their own practice. They incorporated into their healing repertoires practices that they identified as 'scientific'; for example, some decorated their consulting rooms like doctor's offices, wore white coats, or kept patient registers and recorded success rates (see also Waldram, 2000:609; Luedke and West, 2006:2). In particular, some healers did follow the government's request to maintain medical files and protocols for their clients. The appropriation of biomedical language and the diagnosis of disorders using biomedical terminology, however, leaves traditional healers vulnerable to scrutiny by biomedical practitioners.

Mistrust of traditional healing methods also results from the perceived 'misconduct' of healers, which doctors described as follows:

- The usage of herbal medicine may lead to a risk of overdosing, side effects, and pharmacological interactions with biomedical drugs.
- The application of herbs to induce labour can lead to rupture of the uterus (and thus death of the mother).
- Scarification of the skin may cause serious bleeding and increase the risk of HIV infection.
- The promise of a cure in the case of HIV/AIDS, cancer, and/or diabetes may lead to delays in biomedical health seeking and lost follow-up of patients.
- Delayed treatment of diarrhoea may cause dehydration of patients.
- The treatment of infertility may lead to sexual abuse (of clients).

Doctors reported suffering from a loss of effectiveness as a result of patients seeking care in the traditional sector (see also Okome-Nkoumou et al., 2005; Barker et al., 2006; Awah et al., 2008). In the opinion of doctors, the (incorrect) treatment of chronic diseases and surgical interventions are practices that

traditional healers should desist from. Considerable delays were recognised in the treatment of patients suffering from malaria, HIV/AIDS, cancer, stroke, diabetes, asthma, and diarrhoea. Delays were also said to exist for tuberculosis patients⁵ between symptom onset and treatment initiation, in surgical interventions (such as for myoma), or in the case of maternal health (e.g., delivery of complicated cases⁶). In doctors' opinions, the effectiveness of early diagnosis through health promotion could not be validated by healers; they recommended further training:

"There are so many healers who say that they know how to treat HIV by using traditional medicine, but [...] when patients come [back] to test [their CD4 count] in the hospital, it might be that their condition got even [more] severe." (Dr. Mahbub, MoH/MMH, 22.11.2011)

"For advanced breast cancer, healers apply herbal medicine which is not very helpful. [...] You can get temporarily relief [through traditional medicine] but it does not mean that you have cured cancer. These are serious diseases that need close monitoring [...] which even Mnazi Mmoja [hospital] cannot cover. [...] Patients need an appropriate follow-up in an appropriate institution with appropriate treatment, which most of the time they do not have." (Dr. Samura, MMH, 25.11.2011)

Patients' delays in health seeking were not only attributed to the (inappropriate) practice of traditional healers, as mentioned in the second interview quote above. Factors such as features of the health care system (e.g., poor performance of health services, lack of drugs/human resources) and economic constraints were also identified as challenges for adequate health seeking behaviour (see also Hausmann-Muela et al., 2003:3; Green, 2000:405). The complexity of health seeking delays, the preferred usage of traditional medicine, as well as the limits of biomedical health care supply were reflected by doctors and are shown in the following section.

⁵ However, healers' interference was not accused of causing delays with TB patients (Dr. Julius Pandu, TB specialist MMH, 4.1.2012).

⁶ Complicated cases include births requiring a caesarean section or locked twins (Dr. Isimo, head of the gynaecological department MMH, 11.1.2012).

3.3. Biomedical doctors' views: why patients use traditional medicine

The fact that traditional medicine has a high value for patients in Zanzibar was not disputed by doctors – even though many of them claimed ‘not to know’ about or to have any personal experience of traditional medicine. In interviews, doctors mentioned the following factors for why patients seek traditional medicine:

- Experience of side effects with biomedical treatment
- Poor quality of biomedical services
- Lifelong drug usage
- Socio-cultural reasons
- Monetary reasons

Experience of side effects

Doctors explained patients' preference for using traditional medicine as a consequence of side effects and/or fear of drug toxicity with biomedical pharmaceuticals.⁷ Doctors also told about patients preferring combination therapies (e.g., biomedical drugs combined with herbal products) in order to *reduce* side effects. During interviews, some doctors themselves critically evaluated the application of biomedical drugs:

“Reasons [for patients] to stop [biomedical treatment] are side effects. Especially when patients read the package insert, they get scared and seek alternative medicine. [...] In herbal medicine, you have less side effects.” (Dr. Akil, Al-Rahma clinic, 26.11.2011)

“The harm [of traditional medicine] is very limited compared to biomedicine because biomedicine has been purified and is stronger. [...] It is true, biomedicine has side effects.” (Dr. Mahbub, MoH/MMH, 22.11.2011)

Poor quality of biomedical services

The usage of traditional medicine is in line with the lack of drugs in the public sector and the high prices

⁷ For example, toxicity is often assumed by TB patients, who evaluate their red urine (triggered by a bactericidal antibiotic drug, which is an intensely red solid, known for imparting a harmless red-orange colour to the urine) as having worsened their health condition (Dr. Julius Pandu, regional TB coordinator, 11.1.2012).

in the private sector (Zanzibar Traditional and Alternative Medicine Policy Act, 2008). Doctors confirmed a weakening of the health infrastructure and observed distrust of state medical provision among patients:

“Zanzibar is a poor country, we have shortages of medicine, diagnostic tools, and qualified medical personal. The first person the patient meets [in the hospital] is a clinical officer, somebody who has a diploma in medicine, but who is not very experienced, and who does not satisfy the clients [...]. With that dissatisfaction patients look for other means and those healers, they can satisfy the patient! Here [in the hospital], they lack the medical competence [...] and they do not comfort the patients... that is one of the reasons why patients look for healers.” (Dr. Samura, MMH, 25.11.2011)

Lifelong drug usage

In doctors' views, a key factor for delaying or interrupting biomedical treatment is the difficulty in complying with lifelong medications – also described as a lifelong pact (*mkataba wa kudumu*) – as required for chronic diseases such as diabetes and HIV/AIDS (*ukimwi*)⁸:

“The best example is diabetes and HIV, because the medication is a lifelong treatment [...]. Every day you have to take tablets and injections. This is disturbing the patients. They stop and go to healers.” (Dr. Akil, Al-Rahma clinic, 26.11.2011)

“ARVs [antiretroviral drugs for HIV] have a lot of side effects and it is a lifelong treatment. You have to take the drugs daily, you have to run those tests, and not all the patients respond well to ARVs. [...] If someone offers a good traditional drug, they stop taking the ARVs and go to the healer.” (Dr. Samura, MMH, 25.11.2011)

“People use ARVs and [...] go to the healers where they get honey and proteins which keep them again with strength and then they might think that they will be fine (naendelea poa, kumbe).” (Dr. Yeboah, MMH, 21.11.2011)

⁸ For the treatment of TB, non-compliance was not seen as a challenge, unless TB patients are also HIV positive (for Zanzibar, this rate is 15-20% of TB patients), which then requires an extra burden in terms of daily drug consumption. TB management is done by chemotherapy involving a complex regimen (used in combination for open and closed TB). Treatment can last for up to eight months (Dr. Julius Pandu, regional TB coordinator, 11.1.2012).

“It is very hard [for patients] to accept that there is a disease without cure. And it is also hard to take drugs daily for your whole life. [...] Most of all [this is] psychological. If they [patients] feel okay [at a healer], I think they can get much better because they are under stress [referring to HIV patients], their immunity goes down, but if you feel comfortable, and you are happy with traditional medicine, even the CD4 [count] will increase.” (Dr. Rehema, MMH, 21.11.201)

“People know that HIV has no cure, but human beings do not accept this. It is like trial and error, they hope and believe that maybe one day they will be healed. [...] People who are using traditional medicine and get relief will tell their fellows about it, that might also be a reason why many are using traditional medicine, even if they do not abandon ARVs.” (H. Mohammed, Zanzibar AIDS Commission, 12.11.2011)

“[HIV] Patients want to be healthy, and the people who interrupt [the treatment], they [...] might find their family members or traditional healers who tell them that they found some medicine with which they can get healed. They get influenced by the society and the community.” (Dr. Jecha, HIV Coordinator Zanzibar, 4.12.2011)

HIV/AIDS was often mentioned in relation to extended or lifelong treatment. The fact that daily doses of ARVs may control the virus and resist against AIDS – though without eliminating the infection entirely – leads patients to search for alternative treatments (Hardon et al., 2008; Bruchhausen, 2010:252; Mattes, 2011; Meier zu Biesen, 2012). Additionally, patients have to accept an unpredictable therapeutic supply, which again explains their preference for traditional medicine over ARVs.⁹

Socio-cultural reasons

Psychological relief, trust in healers, as well as the influence of society were described as further reasons for patients to seek traditional health care. Anthropological studies have emphasised the importance of

⁹ Until 2005 there was no guarantee of an enduring supply of ARVs in Zanzibar (Dr. Jecha, HIV Coordinator Zanzibar, 4.12.2011 and H. Mohammed, Zanzibar AIDS Commission, 12.11.2011). Furthermore, the intake of ARVs is complex and may not affect the course of the disease positively (Persson, 2004; Liu, 2007:295; Hardon et al., 2007:659). On this topic, see also Setel, 1999; Gerard et al., 2000; Uiso et al., 2006; Van der Geest and Hardon, 2006:5; Beckmann, 2009; Hardon and Dilger, 2011:138.

the extended family in decision making about different kinds of treatment (Feierman, 1981, 1985; Green, 2000:407; Waldram, 2000:605; Dilger 2005, 2008). The involvement of the community during healing periods and convalescence was seen by the interviewed doctors as an important part of traditional healing.¹⁰ Another reason for patients seeking health care other than in biomedical facilities was their moral quest for an explanation for their disease.

As doctors explained during interviews – and as empirical evidence from anthropological studies suggests – patients might need strategies to deal with uncertainty and profound (existential) fears related to sickness, other than those found in hospitals. While physicians focus on the pathology of patients, patients themselves have to describe, name, label, or interpret their suffering as part of their “local moral world” (Kleinman, 1973:209f, 1980:17ff, 2006; Feierman, 1985:75; Luig, 1999:127; Dilger and Luig, 2010).

“Patients use traditional medicine because [...] the first idea is that they believe that someone has bewitched you, so they turn to go to the healer and the most common answer they get from the healer is that this is not a typical HIV infection, but that they have been bewitched.” (Dr. Jecha, HIV Coordinator Zanzibar, 5.12.2011)

As mentioned above, the association of cultural and moral processes – especially witchcraft (*uchawi*) – could be seen as an important factor contributing to disease and life problems. In accordance with these convictions, people often seek traditional and/or religious forms of healing *before* or *complementary* to seeking biomedical treatment (Whyte, 1997; Yamba, 1997; Wolf, 2001; Dilger, 2007, 2008, 2012; Langwick, 2011). Different theories of illness causation – the importance of the ‘supernatural’ and the search for ‘natural’ explanations

¹⁰ Within biomedicine, however, the clinical treatment of patients also often includes several related individuals, e.g., the supervision and/or preventive treatment of family members exposed to TB through a relative (Dr. Julius Pandu, regional TB coordinator, 11.1.2012). In Zanzibar’s hospitals, patients also have to provide their own bedding and food, which means that kin – comprising a kind of *therapy managing group* (Janzen, 1978) – have to stay nearby or visit daily to bring meals.

for illness – are thus reasons for the application of traditional medicine (Janzen, 1992, 1997; Bruchhausen, 2004:116ff).¹¹

Feierman (1981:355) describes a special category of disease causation in the Tanzanian context, which refers to “an illness of (or brought by) God” (*utamu wa Mungu*). This term can be understood as complementary to the idea that “illness of (or brought by) man” (*utamu wa mtu*) exists as well. Illnesses of man are those brought by sorcery, while those of God happen with no moral cause. The causality of ‘illnesses of God’ is close to the English term ‘natural’ regarding its implications. Furthermore, an important category in the Zanzibarian context are ‘illnesses caused by spirits,’ known as *majini* or *masheitani*, a category with a great variety in terms of the kind and nature of illness (Feierman, 1981:355; Giles, 1999; Larson, 2008; Mackenrodt, 2011).

Differences in terms of notions of disease causation between doctors and healers can best be shown by describing the management of HIV/AIDS (Kayombo et al., 2007:2). Healers in Zanzibar differentiate between HIV/AIDS that is ‘caused by God’ (*ukimwi ya mungu*) – also explained as an ‘ordinary HIV-infection’ (*ukimwi ya kawaida*) communicated via sexual transmission (*njia ya zinaa*) – and HIV/AIDS that is not caused by a virus but by the ‘environment’ (*ukimwi ya mazingira*), and thus related to witchcraft (*mambo ya kichawi*). The latter is said to be only treatable by healers, as they are able to manipulate ‘the devil’ who has bewitched the ailing person.¹²

Monetary reasons and the avoidance of surgery

“Patients do not want to be operated. They get scared about surgeries and operations. And then the healer might tell them: ‘Ah, there is no need of surgery.’” (Dr. Kafil, Al-Rahma clinic, 26.11.2011)

11 It should be noted, however, that illnesses are not always exclusively classified into one or the other category (Hausmann-Muela et al., 2003:7).

12 Prof. Al-haji Ahmed S. Shariff, herbalist, 23.11.2011, Saleh Shaaban Saleh, healer, 3.12.2011, and Sulaiman Haji Sulaiman, healer, 4.12.2011. See also the pamphlets ‘*Ukimwi si janga, janga ni mazingira*,’ ‘*Wachawi na vituko vyao*,’ or ‘*Dawa na rehema katika Qur-ani*,’ published by the Islamic healer Sulaiman Haji Sulaiman.

“We are losing them [cancer patients]. They opt to go to the healer first because they fear that their breast has to be removed. They [patients] probably look for shortcuts.” (Dr. Samura, MMH, 25.11.2011)

The above mentioned claim, that patients are looking for ‘shortcuts,’ does not allow for the conclusion that patients have to pay (high prices) for drugs and/or surgical interventions in the biomedical sector – costs which they often cannot afford – with the consequence that they drop out from hospital therapy.¹³

The following case study illustrates how shortages of medicines in public hospitals may become proverbial tokens for patients’ decision to favour traditional medicine. With the case of diabetes, the complexity of patients’ health seeking behaviour and the ambiguity inherent to doctors’ views on collaborating with healers are exemplified.

3.4. Case study: Diabetes

In Zanzibar, *diabetes mellitus* has become a disease of major public health importance since the 1990s, with a current national prevalence of seven percent.¹⁴ The chronic, debilitating, and costly disease is associated with long-term complications, often leading to blindness, kidney failure, heart disease, and amputations. During interviews, doctors explained the increase of diabetes (aside from the presence of genetic factors) as due to stress, lack of physical activity, and, most importantly, the adoption of unhealthy lifestyles and unbalanced diets in Zanzibarian society.

Access to diabetic medication

MMH runs a three-day diabetic clinic, with around one hundred adults and twelve children’s admissions per week. Additionally, diabetic outreach

13 A breast cancer operation at the government hospital costs 300,000 Tsh (-186 US\$; see: [currencyconverter:www.oanda.com/lang/de/currency/converter](http://currencyconverter.www.oanda.com/lang/de/currency/converter); accessed: 28.2.2012). A caesarean section at the government hospital costs 40,000 Tsh (-25 US\$) (Dr. Isimo, head of the gynaecological department MMH, 11.1.2012 and Dr. Kafil, Al-Rahma clinic, 26.11.2011). If a patient is diagnosed as positive for TB, the treatment is free. If a patient tests negative, other investigations are done (e.g., X-ray of the chest) for which patients have to pay (Dr. Julius Pandu, regional TB coordinator, 11.1.2012).

14 Dr. Naasir, diabetes specialist, MMH, 1.12.2011.

programs are conducted monthly in Zanzibar's north and south regions. Patients are also supervised by the Diabetes Association of Zanzibar (DAZ). The (officially required) monitoring of diabetic patients implies a comprehensive checking of blood sugar levels as well as examination of the feet and eyes. The medical treatment varies according to diabetic classification.¹⁵

If access to appropriate medication, quality of care, and good medical advice is given, diabetes can be treated effectively (but not cured). However, as Dr. Naasir – working at MMH's diabetic clinic since 1984 – explained, compliance and adherence to proper follow-up (e.g., laboratory tests at indicated intervals and financing the respective therapy), are significant challenges for most diabetic patients in Zanzibar.

While treatment for children is free of charge, a diabetic adult has to cover an amount of at least 50 US\$ monthly in government hospitals. Diabetic treatment is also available in private facilities, though it is expensive (~ 200 US\$), and thus beyond the reach of most patients, as the annual income is 557 US\$ per capita (see p.6).

At the beginning of insulin supported therapy, patients need to acquire additional equipment in order to conduct independent blood glucose monitoring, or they have to do the test regularly at a clinic.¹⁶ In addition to the fact that diabetic medication is expensive, Zanzibar struggles with drug shortages:

“We do not have enough medication, diabetic patients might get a prescription for two months, but only get tablets for two weeks, so for the rest of the days they remain without treatment. They also cannot afford to buy it somewhere else [i.e., private facilities], which is a problem. [...] And most of the people still do not know how to prevent diabetes.” (Dr. Naasir, diabetes specialist, MMH, 1.12.2011)

15 Type 2 diabetes is most common in Zanzibar and requires oral agents and/or insulin (Dr. Naasir, diabetes specialist, MMH, 1.12.2011). For further details on diabetes in Zanzibar, see Standard Treatment Guidelines, Ministry of Health and Social Welfare, Zanzibar, 2009:214.

16 Home kits cost about 300,000 Tsh (~185 US\$); tests at hospitals range from 1,000-1,500 Tsh (information taken from interviews with affected patients, 21.12.2011).

At the time of our research, diabetic medicine was not included in the government's essential drug kits. MMH received only forty percent of the required diabetic drugs from the Central Medical Drug Store, due to limited funds.¹⁷ Thus, patients were forced to interrupt their therapy. The challenge of lifelong treatment, its side effects, and the fear of injections leads patients – from the doctors' point of view – to consult healers who try to convince them of their ability to cure diabetes. As described in the following account of an affected patient, however, healers are also believed to be particularly useful in terms of educating patients in behavioral change and lifestyle modification – and thus, in the prevention of serious diseases such as diabetes.

Patient example: Shahia

For two years, Shahia suffered from overweight and severe leg problems, which prevented her from walking. In order to detect the cause of her worsening condition, she went to MMH in 2009, the private Al-Rama-clinic, and even up to Arusha (on the mainland) to Ibrahim Haji Hospital. She then received a prescription for a drug to counter low blood pressure and dizziness as doctors said that she suffered from diabetes. As a side effect of this medication, however, she gained more weight and her condition got even worse.

Through her neighbours, Shahia heard about the famous herbalist Babu Madawa (see p.47), who offers education sessions free of charge for people living in Bububu, which is located north of Zanzibar Town. In these sessions, Babu Madawa teaches about the preventive effect of healthy food, herbs, and medicinal plants, gives instructions on a balanced diet, and advises the community on a healthy lifestyle (especially related to diabetes).¹⁸ After attending his classes regularly, Shahia changed her diet and started walking with daily exercises at the beach. After one year of treatment, she stated that the changes to her lifestyle were an important factor in her recovery and physical improvement. She also regarded her new diet (composed of fresh

17 Said Yussuf, pharmacist MMH, 25.11.2011.

18 See also his book on diabetes: Dr. Mohamed Said Ali El-Jabiry: *'Kitabu cha tiba presha na kisukari. Natural Food & Natural Medicine. The solution for your health.'*

fruits, vegetables, and less fat) as a means to prevent further diseases:

“The first thing that helped me was to lose weight. Then, I changed my nutrition according to Babu Madawa’s plan. [...] Natural treatment (tiba asilia) is good because it is food and medicine at the same time. [...] At a healer’s place, you get advice (kushauri) and better counselling than in the hospital. It is good to mix the health suppliers. However, nowadays, I dislike hospitals. [...] For a long time I did not go to the hospital, so I saved money through my new lifestyle.” (Shahia, f., 51 years, 21.12.2011)

Doctors’ views: traditional healers treating diabetes

During interviews, doctors expressed hesitation about healers’ approaches to treating diabetes, as they often saw patients who came to seek treatment while already very weak. Furthermore, they accused healers of giving false advice, saying that instead of recommending the necessary diet (e.g., avoiding high sugar and saturated fat consumption), healers would encourage their diabetic patients to continue their normal eating habits.

“I have seen patients with hypertension and they were advised outside the hospital that they can eat everything, that they do not need any medication [...] and instead [should] use herbs as it will heal. [...] Ninety percent who stopped medication returned with a stroke. [...] Healers say that they can cure diabetes. And patients end up here [in the hospital].” (Dr. Akil, Al-Rahma clinic, 26.11.2011)

“I am sure that it has never entered into their [healers’] heads that diabetes cannot be cured. But most of them promise a patient that they will be totally cured [...]. Sometimes healers test the blood sugar, but that is not about diabetes, diabetes can affect your body very slowly, by five to ten years you can get blind and they can still say ‘your sugar is okay.’” (Dr. Samura, MMH, 25.11.2011)

DN: Patients come already with complications [into the hospital], they went to the healer, got their medication and the healer allows them to eat everything, and then they are admitted here with hyperglycemia.

CM¹⁹: How does your department evaluate the consumption of traditional medicine?

DN: We will always insist that patients should remain in the hospital. [...] The problem is, most of them [patients] would not tell you that they go to the traditional healer. [...] We tell them that the [traditional] medication is good for the blood sugar, but we do not know the side effects. So when we have education sessions, we do not allow patients to use that. Unless someone uses local herbs that were already scientifically tested, unless we know the dosage. (Dr. Naasir, diabetes specialist, MMH, 1.12.2011)

Even though the positive impact of medicinal plants regulating hyperglycemia was acknowledged by some doctors, the majority stated that the concomitant herbal drug use may lead to potentially harmful interactions. This was mainly justified by the lack of transparency in the usage of (non-explored) herbal remedies. Likewise, doctors feared substantial quality gaps in medical care (e.g., correct value of blood pressure or glycemic control), if diabetic patients are treated by healers.

As stated by doctors, education on prevention, monitoring, and early detection of complications are essential parts of diabetes care. Results of a recent survey (conducted by the diabetic ward of MMH) however, showed that there was low awareness among the population on how to prevent diabetes and hypertension. Due to the absence of a national diabetes prevention programme, doctors could imagine collaborating with healers – if additional training was given to them:

“Healers should first of all agree that diabetes cannot be cured. [...] Also in terms of diagnosis, healers should understand what diabetes is. [...] Healers should be able to check the sugar level in their clinics, [...] once it is high, they will know that it is diabetes. [...] Not all patients need medication, they might also start only with a diet and exercise [...]. Our plan on the agenda is to include healers. [...] We want to diagnose the patient and we want that healers refer them to us. Unless if the patient is already on local herbs and continues the checking, then we could collaborate with healers.” (Dr. Naasir, MMH, 1.12.2011)

Several challenges were mentioned in interviews regarding the development of effective quality measures, which would be necessary if healers were included in the primary prevention and management of diabetes. Doctors claimed that the referral of a diabetic patient to a specialist would be essential in case

optimal metabolic control cannot be achieved or if a patient has already developed severe complications. A consensus was expressed by doctors regarding the inclusion of healers in the prevention of diabetes, as they are well respected members of the community. Since there is substantial evidence that inappropriate diet is resulting in the increasing prevalence of obesity and hence hypertension and diabetes, doctors could imagine that healers might become involved in improving knowledge and skills for diabetes self-management.

3.5. Biomedical doctors' views: how to establish collaboration with healers

Two out of eleven biomedical practitioners stated that they had referred patients to a healer in the past. This reflected their overall ambivalence towards traditional medicine, as outlined above. The following factors were mentioned as appropriate referral criteria for those doctors who had already referred patients, as well as for those who could imagine doing so in the future:

- Patients in the hospice stage
- Usage of traditional medicine as pain therapy
- After long periods of unsuccessful treatment with biomedicine

To date there is no collaboration between doctors and healers at an institutional level. Doctors told of healers occasionally (and secretly) entering hospitals at night:

"Healers are coming at night, because [then], the doctors are not around. [...] The relatives call them because if a patient is seriously sick, they [family] cannot take the patient [to the healer]. Sometimes they also kidnap the patient and bring them to the healer." (Dr. Rehema, MMH, 21.11.2011)

"The healers are coming here [MMH] secretly [...], illegally, not officially. What the doctors are trying to do is to advise the patients to only use biomedical treatment." (Dr. Nayiga, MMH, 21.11.2011)

During discussions on potential collaboration with healers, doctors mentioned strikingly often the Muhimbili hospital on the Tanzanian mainland

(in Dar es Salaam) as a model for an allegedly successful collaboration. The Muhimbili University College of Health Sciences (MUCHS) includes an Institute of Traditional Medicine and focuses on researching and developing standardised quality herbal medicines.²⁰

"Like Muhimbili, there is a traditional unit in the hospital, that is why doctors and healers have a collaboration. Patients appreciate that." (Dr. Mabbub, MoH/MMH, 22.11.2011)

"In many hospitals, they have sections for traditional medicine, like in Muhimbili, it means that they [doctors] do trust them [healers], this is very important." (Dr. Kafil, Al-Rahma clinic, 26.11.2011)

"Most of the society does respect healers, because somebody can come to the hospital, shouting 'I am here since morning', [...] but they [patients] would never dare shouting to the traditional healers, never! They respect and trust them, so I think if we would work together, that would be fantastic." (Dr. Rehema, MMH, 21.11.2011)

Prerequisites for collaboration

During interviews, ten out of eleven doctors replied that they would be ready to cooperate with traditional healers, and twelve out of thirteen participants (including MoH representatives) expressed their readiness to teach and train traditional healers in biomedical knowledge. The head of MMH's gynaecological department, however, expressed strong scepticism towards the inclusion of TBAs:

"If you ask me this question, I would say no! I do not need them [TBAs]. We are putting ourselves into problems. [...] People should have a proper education. [...] I know what it means. I started from scratch. Having been a medical assistant, I thought to be a big doctor. But in fact, you really need to learn! [...] If you teach people outside the hospital, people might get killed." (Dr. Isimo, head of the gynaecological department MMH, 11.1.2012)²¹

²⁰ See: <http://www.muchs.ac.tz/ITM1/aboutus.htm>; [accessed 23.3.2012]. In comparison to Zanzibar, the government of Tanzania put forth legislation to address Traditional and Alternative Medicine (TAM) practices already in 2002 (The United Republic of Tanzania, 2002b).

²¹ According to Dr. Isimo, around twenty percent of Zanzibarian women deliver outside the public health care sector. Dr. Samura (MMH, 25.11.2011), however, assumed that sixty percent of women give birth at home/with the help of TBAs.

Others showed readiness to include healers, as long as they are carefully selected:

“We have to identify who is a real doctor [here: healer] and who is not a right doctor. [...] Training is needed to be sure that the know-how is there. [...] Not everyone should call himself a traditional healer. If we could mark them as specialists, that would be good. We are open, they should cooperate.” (Dr. Okafor, MMH, 25.11.2011)

“The problem with traditional healers is, you do not know which one you are talking about [referring to ‘type’ of healers]. [...] It is very difficult to get a collaboration if we do not have the same background, if we do not have the same hypothesis. Because if you do not believe in biomedical principles, it is difficult to have a proper collaboration.” (Dr. Samura, MMH, 25.11.2011)

“The government should mediate among traditional healers and biomedical doctors [...]. They have to prepare seminars [in order to push collaboration] and both doctors and healers have to be invited, so that we can share ideas. Because we act like enemies. Because everyone wants clients. There is a competition!” (Dr. Kafil, Al-Rahma clinic, 26.11.2011)

Following interviews with doctors and MoH representatives, participants suggested a series of general principles – based on the fulfilment of a number of preconditions – that should guide future collaboration with healers:

- (1) Only ‘real’ healers (e.g., those who are trained) should be selected.
- (2) Healers’ performance should be improved through scientific research (on their *materia medica*).
- (3) Treatment and prevention methods of chronic diseases should be improved through basic biomedical training (on pharmacology, chemistry, medicine).
- (4) All actors involved should show a mutual openness towards one another.
- (5) Healers’ work premises should be known by doctors.
- (6) The MoH and/or external NGOs (such as World Doctors) should be involved as mediators.

As biomedical practitioners mentioned several advantages that they would expect from collaboration with healers, it can be concluded that they are not wholly opposed to healers and their practices. They believed that:

- Natural treatment could improve chronic diseases;
- Traditional medicine could be used if biomedical treatment turned out to be unsuccessful;²²
- Patients’ well-being (especially mentally) could be improved through healers’ counselling;
- Healers are closer to the community;
- Healers could be appointed as resource persons for palliative care, as well as prevention and nutrition campaigns (as such campaigns are lacking in the official health care sector).

The potential inclusion of healers in the management of HIV/AIDS was identified as a key issue during interviews. However, as reported by the HIV Coordinator of Zanzibar, the influence of religious leaders was more valued:

“To address stigma reduction, we started to work closely with religious leaders, we use them as peers to provide psycho-social support. [...] I think it is very important to include [also] healers, to see what is the impact of telling or lying to the client that they can cure HIV, what they cannot. There was a point where we started meeting with them.²³ [...] It is very difficult for healers to reduce stigma, I think in our context here in Zanzibar, people who can really claim hard are the religious leaders. Especially in the Islamic community, [...] it is the religious leaders who could help to explain that it is not only because of sexual intercourse that people get AIDS. [...] Religious leaders could play a key role. Because the healers are not very much accepted in the society, even though they are in the community, but they are not a good model.” (Dr. Jecha, HIV Coordinator Zanzibar, 4.12.2011)

Doctors claimed it would be helpful to include healers in the management of HIV/AIDS, on the condition that they are trained: HIV/AIDS could

²² In the treatment of snake poison, for example, healers are seen as the better expert. Some doctors also assume that healers are able to cure simple fractures more quickly in comparison to biomedical practitioners (see also Van der Geest, 1995:362).

²³ In 2006/2007, twenty healers were involved in meetings that were held with governmental representatives in order to discuss HIV/AIDS management in Zanzibar.

be prevented or alleviated through healers' knowledge; opportunistic infections could be treated with herbal medicine; stigma²⁴ could be reduced (if healers were involved in educational campaigns); drop-out patients could be avoided if doctors know where healers practice.

"For me, it is very important because healers live in the society and can easily go to the clients [...]. It is very difficult to reach the clients. But the healers know, Mr. X lives here and Mr. Y lives there, ideally, this is a very important idea to include them in home-based care." (Dr. Mahbub, MoH/MMH, 22.11.2011)

"...Then, we are coming back to the issue of knowledge. Healers have to study, read, and understand what HIV/AIDS is all about. Then, through their knowledge maybe they can search and provide some useful medicine. For example now, most of the (herbal) medicines that are used are just increasing the immunity but not attacking the virus itself. And yes, there are some medicines that could remarkably increase the CD4 of patients, but the viral load is still there." (Dr. Akil, Al-Rahma clinic, 26.11.2011)

Aside from HIV/AIDS, doctors mentioned that healers could contribute to the management of the following other diseases:

- (1) Cancer could be alleviated if healers used their (newly gained) knowledge with their clients.
- (2) Palliative treatment could be covered/supplemented through traditional medicine.
- (3) Diabetes and hypertension could be prevented through the recommendation by healers of healthy food, exercise, and prescribed herbal medicine.
- (4) Mental illnesses could be treated through healers' counselling.
- (5) Malaria could be treated with herbal drugs; the side effects of antimalarials could be reduced.

Conclusion

As shown in this chapter, out of the broad spectrum of traditional medicine, biomedical doctors had comparatively limited knowledge. Rather, they expressed certain hesitations regarding the usage of traditional medicine and/or the practice of healers: the challenge of identifying serious diseases and correct dosages, delays caused by patients' consumption of traditional medicine, or healers' promise to cure chronic diseases were among doctor's major concerns. Despite their overall ambivalence toward the practices of traditional medicine, however, doctors were strikingly open to the integration of healers into the health sector and potential collaboration with them.

Their appreciation of traditional medicine was founded upon the healers' ability to counsel patients and/or establish close relationships with them. The therapeutic potential of medicinal plants was also valued. The majority of biomedical practitioners showed a general openness towards collaboration with healers if a number of prerequisites were fulfilled – mainly related to the control of healers' *materia medica*.

The next chapter deals with the traditional health care sector in Zanzibar. Its representatives (including different kinds of healers) as well as their treatment methods will be introduced. This chapter also reflects healers' opinions about why patients use traditional medicine, and it investigates healers' views about closer collaboration with doctors.

24 On the social phenomenon of stigma in the context of HIV/AIDS, see Alonzo and Reynolds, 1995; Schoepf, 2001; Dilger, 2005; Ashfort, 2010; Dilger and Luig, 2010.

4. Zanzibar's traditional health care sector

Introduction

The revolution in Zanzibar (1964) ushered in a socialist commitment to make biomedicine universally available. The revolution also forced many traditional healers to flee Zanzibar as their practice was seen as “based on superstition and as therefore inappropriate for a socialist society” (Parkin, 2006:698).

As it subsequently proved difficult to provide free biomedical facilities in Zanzibar from the mid 1970s onwards, the islands entered a long period during which neither biomedicine nor traditional medicine was easily available. In this period, Pemba retained relatively more of its traditional healers, while on Unguja healers stayed away or were reluctant to practice because of fear of government reprisals, often turning instead to becoming Muslim mosque leaders or *sheiks* (Parkin, 2006:699). In the late 1980s/early 1990s, the end of socialism, and a move towards political and economic liberalisation enabled the return of private biomedical practitioners, clinics, and hospitals. Since then, traditional (Muslim) healers have once again practiced more openly (Parkin, 2006:700).

4.1. Traditional medicine in Zanzibar today

Number of traditional healers

It was estimated by various stakeholders within this study that today around five hundred traditional healers (including TBAs) are working on Unguja, and at least three hundred on Pemba.²⁵

Traditional clinics

Before the revolution of 1964, Zanzibar had only two traditional medicinal shops (Angal Marango, Salehe Madawa). At present, there are forty-six ‘traditional clinics’ (e.g., Islamic/herbal clinics) in Zanzibar Town, and sixteen in the rural areas of Unguja.

²⁵ This amount is a vague estimation taken from interviews with all stakeholders. Even though the exact number and sex of healers was not known, it can be assumed that – in contrast to specialists in the biomedical sector, who are concentrated in administrative centres – healers are (more) numerous and widely dispersed throughout the islands. Studies from the Tanzanian mainland, for example, indicate that the accessibility of biomedical doctors is low (1:33,000) compared to that of traditional healers (1:350–450) (Marsland, 2007:756; Stangeland et al., 2008:290).

Healers' associations

Unguja

Many healers affiliate themselves with healer associations.²⁶ On Unguja, the healer association called *Taumaza* (*Jumuia Tiba Asilia NGO Taumaza*, literally meaning an NGO for traditional medicine), was established in 1990. Due to internal conflicts, this association split into two in 1995: *Taumaza* (with around one hundred members) and *Jutijaza* (*Jumuia ya Utafiti na Tiba Asilia*, literally meaning an association for research on and the practice of traditional medicine) with more than 340 members.

Pemba

Pemba hosts the Association of Traditional Healers and Midwives (*Juwia ya waganga na wakunga Pemba*), members of the *Jutijaza* association, as well as an NGO called *Peheco* (Pemba Herbalists Cooperation).²⁷

Up to the present, Pemba is known as the heart of powerful spirit activity throughout East Africa. People from Pemba are said to be very knowledgeable in matters of sorcery (Young and Ali, 2005:52; Larson, 2008:70). During interviews with all stakeholders, healers native to Pemba were described as having the reputation of being ‘true practitioners’ (*waganga wa kweli*), i.e. more ‘honest’ and ‘trustworthy’ compared to those from Unguja, who were said to also cheat (*kutapeli*) their clients:

“The reputation is that healers on Pemba do not charge much money, because according to tradition, the healer is not supposed to ask for money, the patient has to contribute himself. [...] People say that healers of Pemba are very faithful and honest, if they believe that they cannot treat a patient, they tell them to go somewhere else. Some clients complain that in Unguja, there is always a demand of a lot of money (from healers), but in Pemba, everything is cool.” (Dr. Mayasa Salim Ali, chair of the TC, 25.11.2011)

Healers from Unguja often acquired their skills through long periods of apprenticeship on Pemba Island. Healers' places for worship and sacrifice on

²⁶ Those associations might also link them with global healer and/or development networks, as reported by healers who were involved in the activities of the international NGO PROMETRA (Promotion of Traditional Medicines).

²⁷ Number of members could not be estimated (Alhamis Said, healer coordinator, 7.12.2011, Chake Chake, Pemba).

Unguja (*mahali pa kuabudu na kutoa sadaka kwa mizimu*) also often host spiritual ghosts from Pemba, as they are said to travel easily between the islands via the sea. Pemba Island is respected as well as feared as it hosts many ‘homes’ (*mizimu*) or ‘clubs’ (*hisbu*) for spirits, including bad places (*giningi*). Spirits hide in the numerous *baobab* trees that are found on the island, they live in caves, valleys, and ponds. They occasionally threaten people, as there is a great probability to ‘catch a spirit’ due to Pemba’s natural features.

4.2. Efforts to foster collaboration with healers: the TU in Zanzibar

“Traditional healers are potential stakeholders. They have to take part in an ongoing collaboration endeavour between themselves and biomedical scientists.”
(H. Bonde, TU, 10.11.2012)

The Zanzibar Traditional and Alternative Medicine Policy Act became operational in 2009. Following the governmental regulations, a Traditional Council (TC) – which endorses and promotes the policy – as well as the TU were established under the umbrella of the MoH. The TC consists of ten members: four MoH representatives (trained in pharmacy), two TBAs and two healers (from both Unguja and Pemba), one representative of the Zanzibar Food and Drug Board (ZFDB), as well as one advocate who is in charge of juridical issues related to the practice of traditional medicine. Quarterly TC meetings were originally scheduled; but due to financial constraints, only four meetings have been held by the TC since 2009.

The TU had seven members in 2012, all governmental employees, working as pharmacologists or pharmaceutical assistants on Unguja. The TU also has an office branch on Pemba Island with two assistants who work as representatives (*mjumbe*) of the Unit. Due to a shortage of human resources in Zanzibar, TU members are supposed to work half-time as pharmacists and half-time as TU members. The financial means of the TU are constrained; the TU has no governmental budget and instead depends on healers’ registration fees as their sole income. Thus, their scope of action is limited; for example, in 2012 the TU was not in the position to visit all healers regularly nor could it fulfil healers’ high expectations in terms of assisting them (e.g.,

through financial support for laboratory surveys on plant samples, the construction of traditional clinics, provision of instruments, transport costs, etc.).

The TC and TU aim to promote traditional medicine, while protecting indigenous knowledge, intellectual property/consumer rights, and medicinal resources. The overall mission is to improve the quality, efficacy, and use of traditional medicine (Zanzibar Traditional and Alternative Medicine Policy Act, 2008:7). As declared by two of the TC’s representatives, the practice of bringing healers to eye level with biomedical practitioners is also envisaged:

“The main target is to make sure that traditional medicine in Zanzibar is used efficiently [...] because traditional healers [...] are hiding. [...] The other aim is to reunite healers so that we can develop guidelines. [...] Those guidelines can be used to make traditional medicine legal, not only official.” (Dr. Mayasa Salim Ali, chair of the TC, 25.11.2011)

“We developed the policy to include traditional medicine and to organise all healers in Zanzibar. [...] The ideas [among all stakeholders] are the same: to make sure that people in Zanzibar are getting healthy, whether they use modern or traditional medicine. That is why we try to make sure that all traditional healers have the same rights as biomedical doctors.” (H. Shariff, Chief pharmacist MoH and vice chair of the TC, 8.1.2012)

The TU is in charge of registering traditional and alternative medicine practitioners, which includes gathering information on their working premises, monitoring healers’ practices, conducting regular field visits to traditional clinics (*vilinge*), preventing misconduct, and proving the efficacy of plant-based preparations through laboratory investigation.

Since its existence, the TU has registered 118 traditional healers. The government has envisaged the registration of *all healers* by the end of 2012.²⁸

The challenge of including spiritual healers

“I do not believe in spirits, but they are true.”
(Anon., healer, m.)

According to TC representatives, the selection of healers should be devoid of any discriminatory bias

28 Mohammed Simba, TU, 12.11.2011.

and should strive to involve different categories of healer, including spiritual healers. Even though there have been calls for the regulation of all traditional healers, to date such regulation has been sporadic, controversial, and – as proved by the statement above – also contradictory:

*CM: Are spiritual healers also recognised by the MoH?
MS: We do also register spiritual healers, because those spiritual healers [...] they treat people and our society, they believe in those spirits. And sometimes, biomedicine fails to treat psychiatric problems, but healers treat them very well, so that is a reason why the society puts a big trust in them. And that is why we register them also.” (Dr. Mayasa Salim Ali, chair of the TC, 25.11.2011)*

“We are not encouraging, we are not discouraging spiritual healing, we are just neutral. We are neutral because there is no harm. [...] Here in Zanzibar, the issue is a bit different compared to mainland. There, they have lot of problems, especially with traditional medicine²⁹... Here in Zanzibar, people are so quiet, people are moving nicely, friendly, we know each other and it is different.” (H. Shariff, Chief pharmacist MoH and vice chair of the TC, 8.1.2012)

However, even though there seems to be a rather liberal attitude towards spiritual healing and an uninhibited handling of spiritual rituals in Zanzibar, during this study ambiguity towards the topic was observed – and is also historically traceable. In the early 1970s, former president Sheikh Abeid Amani Karume placed restrictions on the performance of all religious rituals, destroyed several places of worship, and declared a ban on the performance of spiritual healing rituals (Larson, 2008:40). This strict prohibition loosened during the 1980s and 1990s, but nevertheless healers had to announce spiritual rituals in advance and ask for permission from the government cultural officer (*afisa utumaduni*). If permission to perform a ritual was granted, the police would attend the ceremony in order to assure that no witchcraft (*nguvu ya uchawi*) was involved.³⁰

29 On the Tanzanian mainland, an ongoing dispute about practice regulations of healers has been fuelled by the fear of witchcraft (Semali, 1986:89; Stangeland et al., 2008:294; Bruchhausen, 2010:249).

30 Group interview with TU representatives, 16.11.2011.

During interviews traditional healers claimed that the government still aims to control the traditional medical sector, while benefitting from its practices at the same time. Healers reinforced this argument by reporting their experiences of having supported politicians' desires for protection by healers (from witchcraft and/or bad spirits), since (bad) spirits may cause different forms of suffering, including economic problems and ruined relationships. Healers recounted that in both 1966 and 2007, the government of Zanzibar initiated a witch finding movement (see also Parkin, 2006:703; Mbogora, 2002) led by traditional healers, who were in charge of eradicating witchcraft in order to protect the whole island (*kwa kukinga zote Zanzibar*). Healers claimed that they are still asked to 'spiritually clean' places or to perform rituals in which politicians are blessed when elections are coming up (*karibu na uchaguzi*).

During our research, it was observed that the performance of spiritual rituals required wide social participation, and neither the rituals nor the existence of spirits were surrounded by secrecy. Nevertheless, vagueness towards the topic of spiritual healing was noted through the fact that healers introduced themselves in the presence of governmental representatives as 'pure herbalists' (*waganga wa asili*), even though they were involved in 'spiritual matters' (*mambo ya sheitani*).³¹ Furthermore, there has been a lasting dispute between the two healer associations *Taumaza* and *Jutijaza* with regard to their expertise ('spiritual' versus 'non-spiritual' healing methods), which reflects the ambiguity of this topic:

“Our association only allows healers to be members who are herbalists and not those who are involved in spiritual healing. Those who are practicing with devils and spirits, they want to be famous, they always look for prestige. It cannot work with those who believe in spirits. Because spirits are too demanding. Patients might be exploited by healers taking their money (wanatamaa pesa) and research on spirits is not possible. [...] So we decided to leave them alone and build our own NGO.” (Prof. Al-haji Ahmed S. Shariff, herbalist and founder of the healer association TAUMAZA, 23.11.2011)

31 Unlike spiritual healers, the treatment offered by herbalists aims to address symptoms and causes as a totality. Some healers also preferred the term *asilia* as it is associated with naturopathy and modernity (Green, 2000:412f; Bruchhausen, 2004:144f; Stangeland et al., 2008:294).

“The Act has its guidelines, it says: ‘Do not use the spirits, use only herbs!’ [...] But when it comes to practice, you cannot give herbs without doing diagnosis and the diagnosis comes through spirits. [...]. In case of mental problems, biomedical doctors do not have the source, but we can find the source (of the disease).” (Zabra Hassan Ali, healer and founder of the healer association JUTI-JAZA, 16.11.2011)

This dispute among healers can probably also be seen as a sign of competition within the field of traditional medicine, as all healers look for clients or, as expressed by one healer, try to get a ‘piece of the steak’ (*donge nono*). Apart from internal conflicts, the process of governmental registration was discussed controversially among healers.

Healers’ registration

The purpose of the healers’ registration is to ensure that traditional medicine practices are conducted as appointed in the policy regulations. Therefore, healers must be visited (unannounced) by the TU at their workplace before they are registered. Only if a healer is known by the wards (*shehia*) to have been practicing for three years can the governmental registration process begin. During this process, it is expected that healers adapt to official (hygienic) demands, e.g., herbal medicines should be stored and processed in a clean environment. Healers are also asked to carry out their practice in properly registered buildings, which have to be in a tidy environment (e.g., healers with poor sanitary arrangements are asked to improve them). The part of the premises used for healing practice should be clearly demarcated from the part used for other purposes, in order to ensure the safety and privacy of patients. According to the regulations, follow-up visits should be planned to see whether a healer has adhered to the requested standards of practice. However, as the TU wants to win healers over in order that they register, they have not yet imposed a sanction on those who do not follow all demands.

Healers are also supposed to report to the TU about their professional ability to treat different diseases. As many healers have claimed to have found a remedy against AIDS (*kugundua dawa ya kuponya ukimwi*), the TU is especially alert to control the impact of applied substances. This

control includes the investigation of plant samples through the Zanzibar Food and Drug Board (ZFDB).³²



Activities of the TU: (1) Field visits to traditional healers; (2) Plant screening through the ZFDB

Registration process

Healers have to pay for registration with the TU (20-33 US\$). Aside from the cost of the registration form (3,000 Tsh), a healer has to pay for the registration itself (*usajili*, 15,000 Tsh), the permit (*kibali*, 15,000 Tsh), and, if existing, her/his place of practice (*kilinge*, 20,000 Tsh). The TU reissues the permit every two years. The permit is not transferable (e.g., to other locations) without written approval of the TU. The permit also does not allow the execution of ‘unsafe practices,’ nor does it authorise the holder to practice in unregistered premises or during

³² ZFDB collects, produces, processes, controls, and labels herbal drugs. Even though it is not compulsory, many healers are eager to bring their samples to be checked; however, they have to pay for the service. A sample test costs about 3,000-5,000 Tsh (1,000 Tanzanian Shilling = ~ 0.62 US\$). The test does not identify biochemically active plant ingredients but is supposed to detect toxic solvents.

a period of suspension or revocation (Zanzibar Traditional and Alternative Medicine Policy Act, 2008).

When asked about the new policy (content and existence), ten out of thirteen healers answered that they were familiar with the new law (two healers had been involved in defining the policy; others received information via promotion channels such as magazines, radio, TV, and healer associations who informed their members).

Some healers considered registration as an advantage (*faida*), contributing to their publicity. The fact that the permit guarantees legal protection and security – in Zanzibar and abroad³³ – was also valued positively. Furthermore, healers appreciated the fact that the screening process aims to identify poisonous plants. Disadvantages (*hasara*) that were mentioned comprised the fear of penalties,³⁴ the rather time consuming registration process, and the perception of a lack of ‘visible benefits’ through the procedure. Some healers judged the process as untransparent and feared misappropriation of their fees by the TU. They also complained about the (high) costs of registration; although some healers admitted that the payment could be seen as a method to distinguish between serious healers (*waganga wa kweli*) and swindlers (*watapeli*).

4.3. Traditional healers and their fields of expertise

Healers (*waganga*, pl.) are considered to belong to a ‘local tradition’ of medical knowledge (*dawa ya kienyeji*) that differs from biomedicine (*dawa ya kisasa*, *dawa ya Kizungu*). The term *mganga* (sing.) can refer to either a traditional or biomedical practitioner (Marsland, 2007:752). The difference is usually indicated with a descriptive adjunct: *wa hospitali* for biomedical practitioners, and *wa kienyeji*, *wa asili*, or *wa jadi* for traditional healers. In Zanzibar, the general term for people with expert knowledge

³³ The registration permit was seen as a legitimate advantage with regard to healers’ mobility and legal coverage when travelling abroad. Even though traditional practitioners are only allowed to work strictly within the regional area for which they are registered, they may apply to the TC for a location change.

³⁴ “Any practitioner, who fails to meet the requirements of the code of conduct and practice, shall be subjected to disciplinary measures for a professional misconduct” (Zanzibar Traditional and Alternative Medicine Policy Act, 2008:6).

(*fundi*) may also be used with reference to a healer (Larson, 2008:159; Mackenrodt, 2011:53).

In general, traditional healers are a heterogeneous group of persons representing a broad range of practices (Gessler et al., 1995:145; Langwick, 2006:155, 2007:90). This broadness was confirmed by patients in the quantitative sample who defined traditional medicine (*tiba za asili/dawa ya kienyeji*) as being:

- Herbal medicine (97/100)
- Qur’an medicine (75/100)
- Scarification (56/100)
- Spiritual matters, *masheitani* (55/100)
- Spiritual matters, *kibuki* (47/100)
- Divination (48/100)

In Zanzibar, healers might gain their expertise from a variety of sources, and each healer uses specific medicines and techniques. However, there are some common methods. As reported during interviews, the great majority of healers mix healing practices, and this varies according to the different types of healers that are found on the islands.³⁵

Becoming a healer

Traditional healers in Zanzibar gain their knowledge and status differently. The following major paths led healers to their profession:

- Inheritance within the family
- The experience of a serious or ‘abnormal’ illness, which was interpreted as an appeal to become a healer
- Own decision, followed by a period of apprenticeship and research
- Initiation or inheritance by an ancestor spirit (*mzimu*)

The following case study of the healer Asha reveals that calls (by ancestors) to become a healer cannot be ignored, as it would be considered a sign of great

³⁵ Data are taken from interviews with traditional healers as well as conversations with healers during training sessions on Unguja (28-30.11.2011) and Pemba (5-7.12.2011).

disrespect and is believed to result in misfortune or punishment with disease. Asha's story also illustrates the importance of a person's nationality and affiliation to a tribe (*makabila*), and the differentiation of spirits in Zanzibar (Larson, 2008:60; Mackenrodt, 2011:63f).

Healer example: Asha

Asha was born on the Comoro Islands but moved to Zanzibar in her early childhood, where she has been known for more than fifteen years as an expert in conducting *kibuki* rituals.³⁶ Her healing career began with her own illness. For many years, Asha suffered from fever and recounted long periods of health seeking that included biomedical facilities and the consultation of traditional healers. The healing process began only after a return to her birthplace on the Comoro Islands and the acceptance of having been bothered by her ancestor spirit (her grandmother, also a healer). This discovery brought clarity to her frustrating periods of health seeking, released her from a persistent affliction, and finally led to her mission to heal others:

"I got my knowledge to practice through my grandmother (kazi ya tiba nilifundishwa kwa bibi yangu). By the time she died [on Comoros], I got sick with strong fever (alipokufa nilipata homa sana) [in Zanzibar]. [...] One day, a [Zanzibarian] healer told me that I have left my tradition at home [on Comoros], that I have to go back to proceed because that is the reason why I got sick. [...] Then I decided to travel to Comoros in order to see a healer there, because I had doubts (wasiwasi) [about my disease]. [...] This healer said that I should get the mkoba [here: basket for healers' tools] of my grandmother and the problem will be solved. Because my ancestor wants it. That is how I got the knowledge to heal." (A. Abubakar, healer, 15.11.2011)

Asha reported that up to the present she works with the aid of her grandmother, who directs her via dreams in the usage of medicinal substances and/or rituals appropriate to the specific needs of a client.

³⁶ *Masheitani ya kibuki* are Christian spirits from Bukini, Madagascar. *Kibuki* spirits are said to have arrived in Zanzibar from Madagascar through their contact with people migrating via the Comoro Islands to Zanzibar (Larson, 2008:68,75; Mackenrodt, 2011:105).

4.4. Traditional healing practices

The Kiswahili term for medicine, *dawa*, has a wide range of meanings, especially within Islamic theological discourse. When used in relation to healing or the process of mending someone/something, *dawa* can refer to all sorts of actions, words, or curses that can be obtained from medical specialists. The effect of *dawa*, however, is not exclusively positive, as it can also be applied as an agent to cause harm (*dawa mbaya*) (Kutalek, 2001:133; Larson, 2008:23).

Widespread among healers is the usage of herbal medicine (*miti shamba*) for the treatment and alleviation of (chronic) diseases (Chhabra et al., 1987, 1994; Nsimba and Kayombo, 2008:319). Treatment with plants can be complemented by a ritual evocation (*kubariki*) through the healer's powerful hands (*nguvu ya mikono*) (Langwick, 2011:79; Feierman, 1981:357; Hahn and Kleinman, 1983a+b; Bruchhausen, 2004:133). Special medicinal plants may also be used to reveal secrets (*kuvumbua siri*) and/or to treat diseases, which are unknown or caused by witchcraft.

Aside from plants (of which roots, leaves, stem barks, and fruits are used), patients can be treated with minerals or animal extracts. Many healers also make use of massages (e.g., during and after birth or for paralysed patients).

Spiritual healing

Healers who are specialised in spiritual rituals use the power of spirits to diagnose and/or treat health problems. Healing rites are based on the attributes of the specific spirit deemed responsible for a patient's (health) problem. The therapeutic action of performed rituals and divination³⁷ extends to problems of daily life beyond illness (Mshiu and Chhabra, 1982; Gessler et al., 1995:146; Green, 2000:413). Although reliance on divination for diagnosis renders the physical examination of patients largely unnecessary, treatments within spiritual healing ceremonies usually involve the application and/or ingestion of herbal medicines.

³⁷ Divination (*ramli*) is an inquiry into the nature or cause of misfortune and/or disease (Janzen, 1992:91; Kutalek, 2003).

Religious healing

Healers also access the word of God – manifested through the Qur’an – which offers knowledge and power. Those healers who consult the Qur’an write charms (*hirizi*) on clothes (worn by the patient), recite religious texts (*kitabū, kisomo*), and/or read special verses (*nyiradi*) to the patient that are related to healing. The base for healing verses is always the Qur’an or excerpts from the Qur’an. Verses that refer to medicine – called *ghaza* – are supposed to heal, protect, and comfort people. If a patient is believed to have been bewitched, the reading is supposed either to heal the person or to punish the one bewitching (with death or illness). Islamic healers may also recite prayers (*dua*) or a liturgical incantation (*Hal Badiri*) for relief from sickness/natural disaster or against a person who may have committed an evil deed. Reading the Qur’an is also believed to make a spirit powerless, as the reading can remove the spirit and ensure that he/she is longer ‘virulent.’³⁸

Very often, religious healers make use of (holy) medicinal scripts (*kombe*) written with saffron on a plate, which is washed and then drunk (liquid ink) by the ailing person (see also Beckman, 2009:138). Islamic healing methods are often supplemented by herbal remedies.

Dawa ya suna

Understanding Zanzibar’s healing practices implies an awareness of the so-called *dawa ya suna*, which forms part of Swahili traditional medicine practiced by a healer (*mganga*) or religious leader (*mwalimu*). The word *suna* (literally meaning ‘good tradition’) has a strong link to the Prophet Muhammad and refers to medicine he used, things he did, and blessings he gave (*maisha ya prophet Muhammad ndiyo mana ya suna*). Reading (*kusoma*) and writing (*kuandika*) Qur’an verses are essential pillars of *suna* medicine. *Dawa ya suna* is positively connotated, as it implies “that which is recommendable according to Islam” (Larson, 2008:162).

38 The famous Qur’an readings related to healing are: Harubukatil, Sefulkatil, Halalbadri, Waslatilshafi, Kanjularshi, Joshan, Qoran, Talibulasmau, and Burdai. Other famous books for medicinal treatment in East Africa are: the medicine book (*kitabū changanya*), offering scripts on medicine written by Mohammed bin Ali al-Mandhiri around 1274 AH/AD 1857 and Ghazzali, Shans al-Maans, see: House of Wonders – Museum in Zanzibar, department for traditional medicine.

In the context of *suna*, diseases and/or epidemics (especially HIV/AIDS) have been embedded in a Muslim discourse (Beckmann, 2009:131; Becker, 2007) and are explained as a punishment from God (*adhabu ya mungu*) or trial (*mtihani*). A healing process necessarily includes prayers for forgiveness (*dua*) and requests to receive the mercy (*rehema*) of God.

During interviews, *dawa ya suna* was often metaphorically explained as a ‘medicine of the soul’ (*dawa ya kiroho*) or ‘soap for the soul’ (*sabuni ya roho*³⁹) – a tool for preventing/healing diseases through religious words and sacrificial offerings (*sadaka*). As explained by one of the interviewed healers, this offering by the sick person (*mgonjwa anaweke sadaka*) is embedded in his/her request for forgiveness (*mtu anataka msamaha*):

“The source of all diseases are in the heart (*moyo, arab. khaldi*). [...] You need to get compassion and sympathy (*rehema*), perhaps through a payment of ten lines [Qur’an verses], as a penalty. God says: ‘If you do bad things to me, I punish you!’ But punishment is limited because there is a veil of mercy (*rehema*). *Rehema* is a sort of cache for people who are religious and praise God. [...] *Suna* and affairs of the soul (*mambo ya kiroho*) are connected. You can prevent diseases with a soap of the soul (*sabuni ya roho*), you say first: ‘In the name of Allah, please direct me on the right way.’ And if you accept your problems, you get psychological relief (*ukubali matokeo*).” (Machano Suleiman Omar, healer, 14.12.2011)

The practice of differentiating ‘ordinary diseases’ (*maradhi ya kawaida*) from those ‘of the soul’ (*maradhi ya kiroho*) provides the basis for Qur’an healing practices. ‘Matters of the soul’ (*mambo ya kiroho*) are treatable by different methods:

- Reading the Qur’an (*kusoma*) and applying water;⁴⁰
- Reading the Qur’an while laying hands (*kushika*) on the ailing person;
- Offering prayers in order to return to the ‘right track’ (*ni lazima kurudi*), as it is believed that a sick person is punished (*kuadhibu*) because of having ‘lost the way of Allah.’

39 The term *roho* has several meanings. *Roho* can denote a vital principle; it may also be translated as life (*kuwa hai*) and is capable of making a mind potentially active (Larson, 2008:58).

40 Healers explained that, as it is written in the Qur’an, ‘nothing works without water.’ For the administration of holy water among healers, see also West, 2006 and Ashforth, 2000.

Dawa ya chuku

In addition to *sunu*, the traditional therapy of cupping (*kupiga chuku*) is favoured among Islamic healers, as ‘Hijama cupping’ was practiced (monthly) by the Prophet Muhammad and recommended to all humankind. Cupping medicine (*dawa ya chuku*) is usually performed by inducing heat into a glass cup or similar object (e.g., horn of a cow, *pembe*) which is then immediately put on the skin. The vacuum created produces a suction effect by either using heat (fire) or mechanical devices (hand or electrical pumps) that allow the collection of blood (*damu*). *Chuku* practitioners believe that the suction mobilises blood flow and thus promotes healing. Healers use cupping to treat a broad range of medical conditions such as blood disorders (anaemia, haemophilia), rheumatic diseases (arthritic joint and muscular conditions), fertility and gynaecological disorders, and skin problems (eczema, acne). It was also claimed to support psychological well-being.

Both practices, *dawa ya sunu* and *dawa ya chuku*, are also used as a form of prevention or religious blessing. Nevertheless, they were discussed as controversial by all stakeholders. Biomedical doctors as well as some healers themselves warned that *dawa ya chuku* could be dangerous if not performed properly, as blood clotting or the over-cupping of a patient could happen.

Even more controversies arose in discussions around *dawa ya sunu*. MoH representatives as well as TU members accused practitioners of *dawa ya sunu* as being ‘fake healers’ who exploit people by ‘selling the word of God with simple vinegar.’ During all training sessions, warnings were expressed:

“These days, dawa ya sunu is not a [health] service, but a business (dawa ya sunu siko hizo siyo huduma, ni biashara). Do not use sunu as a business (usitumie sunu ya biashara)!” (H. Shariff, Chief pharmacist MoH and vice chair of the TC, 30.11.2011)

Some healers themselves accused those who do not practice the ‘real’ *dawa ya sunu* of being charlatans:

“Sunu attracts Muslims, so people use this weakness, looking for money. People who sell dawa ya sunu might not offer the right medicine (dawa).” (Sulaiman Haji Sulaiman, healer, 4.12.2011)

Government representatives are eager to find healers who conduct their business clandestinely in or around mosques, and want to prohibit the charging of money for reading religious scriptures and the selling of fake medicines. In reaction to this governmental interference, healers who practice the ‘real’ *sunu* claim that it is a time consuming service that can and should be charged for.⁴¹

Summary of healers’ diagnostic tools and fields of specialisation

Diagnostic and curative techniques
Oral investigation of the patients’ past medical history ⁴²
Inquiry into patients’ date of birth, exact time of birth, and other circumstances, like stellar constellation
Usage of scientific books and internet, assessment of hospital diagnosis brought by patients
Hands (which are applied on the patient’s body)
Horn (<i>pembe</i>) (applied on those parts of the body that are in pain ⁴³)
Divining board (<i>baol ramlu</i>) (it operates by drawing wavy lines in sand spread on the board)
Dreaming power (<i>kuoteshwa ndoto</i>) (the receipt of messages from ancestors/spirits)
Qur’an
Consulting of spirits (within rituals, at holy places) ⁴⁴

41 The fact that traditional health care is often embedded in religious ceremonies does not imply that it is located outside the realm of economic transaction (Van der Geest, 1992:671; Bruchhausen, 2004). On monetary transactions between patients and healers, see also Semali and Ainsworth, 1995 and Nichter, 2002:257.

42 It is important to note that the diagnosis of a disease can already be part of its therapy (Feierman, 1981:353; Langwick, 2007:108). A healer also often compiles the diagnosis and the process of convalescence *together* with the client (Whyte, 1991:167; Kutalek, 2001:118, 2003) or relatives (Kleinman, 1980:34; Janzen, 1992:103; Langwick, 2006:155, 2007:90).

43 Some healers claimed that they are able to smell the diagnosis through the horn. Thus, they consider this tool suitable for deaf-mute patients who cannot communicate their discomfort.

44 Spirits may be called upon (*kuitwa*) in situations where the spirits’ advice is needed. The consultation of spirits leads the healer not only to the cause of the disease but also in choosing the right medication or the right Qur’an verses to treat certain ailments.

Healers' specialisation⁴⁵
Gynaecological disorders (algomenorrhoea, absence of menorrhoea, infertility, myoma, uterus problems)
Skin diseases (wounds, lumps, abscess, herpes, scabies, haemorrhoids, fibroma, fungus)
Orthopaedic problems (numbness of extremities, setting of dislocated bones)
Stomach problems (especially gastric ulcer)
Heart problems (hypertension, stroke, paralysed patients)
Non-communicable diseases (diabetes, fever, asthma, cancer)
Communicable diseases (TB, Malaria, HIV/AIDS)
Teeth and eye problems
Sinuses
(Mal-)Nutrition

4.4.1. Traditional treatment methods: a few examples

During the study, traditional healers were asked about the management of certain diseases, and about indicators proving the appropriate diagnosis and use of (herbal) medicine. This included collecting information on materials used, methods of preparation, and the administration of medicines in the treatment of different diseases. Due to the sensitive issue of disclosure, plant species are not mentioned by name in this report, but broadly described as herbal medicine (*miti shamba*) or herbal infusions (*dawa za maji*).

HIV/AIDS

The first case of HIV in Zanzibar was diagnosed in 1986. A national Zanzibar AIDS Control Program was established two years later in order to monitor and control HIV incidence. In the following years, HIV testing and counselling became an increasingly important part of the government's health

⁴⁵ A few healers stated that they are able to heal *all* diseases. The majority, however, claimed to be specialised in certain ailments and curative practices. They mostly used biomedical English terms themselves; some were translated from Kiswahili to English.

interventions.⁴⁶ The last population-based survey (in 2008) showed an HIV prevalence rate of 0.6% in the general population. However, HIV surveillance conducted among the most at-risk populations showed a concentration of the HIV/AIDS epidemic among injecting drug users (16%), men having sex with men (10%), and commercial sex workers (11%).

Traditional healers were found to have a fair knowledge of HIV/AIDS and its management. The majority claimed that AIDS is caused by a virus transmitted into the blood system (thus needles and blades were used with caution). Additionally, however, falling ill with HIV was also interpreted as a punishment from God.

Healers stated that they are able to diagnose HIV/AIDS by looking at the patient, by examining his/her symptoms, and/or through divination. Many healers also requested patients' test results from the hospital (in order to start treatment or to transfer them to biomedical facilities, where ARV therapy could be initiated). Some healers claimed that they do a commendable job in alleviating suffering from HIV/AIDS. Opportunistic infections – such as skin infections (including herpes zoster), diarrhoea, coughing, and fever – are mainly treated with herbal remedies. Herbal substances are either applied or inhaled (*dawa ya nyungu*), prepared as a powder, decoction, or given as a mixture of different plant compounds (*changanya ya dawa*). Counselling (*kushauri*) is considered an important part of HIV/AIDS treatment; words and Qur'an prayers were said to give patients confidence.

The indicators given by those healers who claimed to have cured HIV/AIDS were: HIV positive patients who had seroconverted; patients giving birth to a healthy child; recovered patients; and patients who gained weight or rid themselves of opportunistic infections after the use of traditional medicine.⁴⁷

⁴⁶ Today, around 30,000 people are tested monthly in Zanzibar (Unguja and Pemba). Up to sixty patients a day visit the MMH's Care and Treatment Centre (CTC) in order to attend ARV adherence classes and/or receive ARVs. At the CTC, thirteen doctors and nurses are responsible for patient care (Dr. Jecha, HIV Coordinator Zanzibar, 4.12.2011 and H. Mohammed, Zanzibar AIDS Commission, 12.11.2011).

⁴⁷ On the topic of healers treating HIV/AIDS, see: Van der Geest, 1997; Probst, 1999; Schoepf, 2001:342; Romero-Daza, 2002:173; Bruchhausen, 2004:143f; Kayombo et al., 2007:5; Stangeland et al., 2008:290; Langlois-Klassen et al., 2007 and Pollock, 2011:111.

Tuberculosis (TB)

The tuberculosis rate in Zanzibar – which had remained stable for around fifteen years (at 350 cases per year) – increased slightly in 2010, during which there were 450 patients (eighty percent of the cases diagnosed on Unguja).⁴⁸

The causes of TB which were most frequently mentioned by healers were germs/smear infection with bacteria and/or HIV infection. Not all healers declared themselves able to treat TB, saying that they refer patients straight to the hospital in case they show peculiar symptoms.

Healers claimed to know the symptoms and signs of TB, such as persistent cough for more than three weeks, coughing sputum, dry lips, night sweats, fever, coughing blood, chest pain, loss of body weight and tiredness, HIV infection, medical history of the patient, and/or medical diagnosis. Healers reported being able to detect TB symptoms through investigation of the patient with the horn, close observation of the patients' cough and sweat, and/or by checking certain body parts (skin, chest). They stated that there is a wide range of plant species used to treat and cure TB. Most of the extracts from the plant species are used as crudely mixed plant preparations or compresses placed on the chest; on average applied for seven days. Evidence of the effectiveness of such treatments was concluded from the assessment of recovery and improvement of the above mentioned symptoms. Healers also took into consideration the patients' recovery status through laboratory tests or self-reports by patients (see also Orodho et al., 2011).

⁴⁸ The identification of TB patients is based on both active and passive methods. Active case finding is looking systematically for cases of active tuberculosis and latent infection in groups known, or thought to be, at higher risk of tuberculosis, rather than waiting for people to develop symptoms/signs of active disease and present themselves for medical attention (passive case finding). If patients are suspected of having TB, they are tested with AFB microscope testing. There is both home-based care and health facility treatment. If a patient decides to take treatment at home, the government TB program selects a family supervisor. In order to receive the treatment, the supervisor has to come to the local health facility at certain intervals in order for compliance to be controlled. Patients with open TB are visited at home by staff members; family members receive lessons to avoid infection (Dr. Julius Pandu, regional TB coordinator, 11.1.2012).

Hypertension, stroke, diabetes

The study revealed that treatment of hypertension, stroke, and/or diabetes is an issue for all healers. Healers associated the increase of heart problems and/or diabetes with stress, lack of physical activity, and unbalanced diet. High blood pressure could be understood as pressure caused by a spirit ('who is bothering the patient from inside'). Before consulting a healer, many diabetes or stroke patients have often already been diagnosed as such at a hospital. Healers also use biomedical diagnostic tools themselves (e.g., a plasma glucose test).

It was common among healers to give (paralysed) patients regular massages. Patients who suffered from a stroke/diabetes were told to rest and modify their lifestyle.⁴⁹ Great emphasis was put on the type, characteristics, and nutrition value of different foods and beverages.⁵⁰ Consequently, healthy dietary practices emerged as a distinct field of medical knowledge. Healers used special herbal remedies and infusions to treat diabetes and numbness (*ganzi*). Joint problems as a consequence of diabetes are treated with herbal steam baths, or cloths soaked in herbal preparation are used as leg compresses.

Malaria

Until recently, malaria represented Zanzibar's number one public health problem. In 2003, malaria accounted for forty-three percent of all outpatient consultations and ranked first among diseases in terms of both morbidity and mortality in health facilities (AFM, 2008). After changes in treatment policies (e.g., introduction of Artemisinin-based combination therapies, indoor residual spraying programs), the malaria parasite prevalence among the general population, as well as children under five, was less than one percent by 2008 (ZMCP, 2011).

According to healers, various medicinal plants exist for the treatment of malaria. Plant leaves are cooked and administered daily or prepared as

⁴⁹ Some healers offer patients to stay with them for several weeks. Those healers who offer consultations on a regular basis and/or inpatient treatment facilities were especially favoured among patients.

⁵⁰ For medical preparations and food, healers in Zanzibar often drew on works by the Islamic physicians Ibn Sina (Avicenna) and Ibn al-Baytar (Saleh Shaaban Saleh, healer, 4.12.2011).

a steam bath; plantroots are given orally. Malaria treatment usually lasts for seven days. Laboratory tests and/or a regaining of strength by a patient are interpreted as indicators for successful malaria treatment.

Other diseases

Apart from the diseases mentioned above, the other diseases included in healers' therapeutic management are summarised as follows:

Diarrhoea, stomach problems

Patients with stomach problems are asked to accurately describe and locate their pain. They are interviewed about their temperature, eating habits, and digestion. Powdered herbs or herbal teas are famous for the treatment of stomach problems.

Hemorrhoids

Hemorrhoids are treated with herbal medicine (partly used in combination with cold milk). Herbal capsules can also be inserted as a suppository, which are supposed to open inside the intestine in order to heal the hemorrhoids.

Cholera

Cholera symptoms such as vomiting and loss of bodily fluids are treated as a first aid measure with herbal medicine. However, healers stated that they usually transfer cholera patients straight to the hospital.

Asthma, respiratory infections

Essential oils – such as eucalyptus or peppermint – were reported to be effective remedies for respiratory health problems. Essences can also be added to a bath. Inhalation of the vaporised molecules of these oils in the air or the hot steam of a bath may dissolve hardened mucus, open nasal passages, and clear sinus and lung congestion. They may also be rubbed into the chest area.

Gynaecological, pregnancy, and childbirth-related conditions

Menstruation pain and irregular cycles are treated with herbal medicine. Herbs are also used to open the birth canal and to treat myoms. If there is strong labour pain, women are given plants in order to deliver more rapidly. Counselling and Qur'an reading (*dawa za kitabu*) are famous treatment elements for women experiencing infertility, during birth, etc.

4.5. Traditional healers' views: why patients use traditional medicine

According to healers, the following main factors contribute to patients' usage of traditional medicine:

- Usage of biomedicine without benefit
- Identifying the nature of a disease
- Harassment at hospitals
- Monetary reasons and the avoidance of surgery

Usage of biomedicine without benefit

Strikingly often, healers observed that patients use traditional medicine after ineffective (and sometimes long-term) treatment with biomedicine (especially with drugs). For specific ailments and diseases,

healers and patients perceive herbal remedies as equally – and often more – effective than the medicines prescribed by physicians.

Identifying the nature of a disease

Closely related to dissatisfaction with biomedicine are the healers' alleged skills in identifying the 'true' nature of a disease (*kutafuta chanzo cha ugonjwa*). This aptitude was said to distinguish them from medical doctors:

"Patients are dying in the hospital, because they [themselves] consider other things [as being the source of the disease], and in that case they get pressure inside themselves, because they might think that they have been bewitched. And this pressure makes them go to the healer. They do not get treated [effectively in the hospital] (sababu kubwa hawafanikiwe). There, they might be treated for a long time, admitted, discharged, admitted again, but without success." (Ali Haji Rajab, healer, 15.11.2011)

"Often, when patients go to the hospital, they find out that this is not a medical problem, and they get the advice to go to the traditional healer (wanasema ni lazima kufanya dawa za nje, ya ruhani⁵¹)[...] and then I do kibuki and the spirit comes and says that 'for this problem do this and do that.'" (A. Abubakar, healer, 15.11.2011)

Harassment

The problem of harassment in hospitals was a recurrent theme mentioned with regard to obstetrics:

"Many women [...] get harassed in the hospital, they are told: 'Do this and do that,' but it is not very pleasing, especially during delivery. What women need is to be pleased, that's what they miss in the hospital, that's why they say: 'I do not want to go to the hospital, there I do not get treated nicely, the language is hard.' Patients disagree with that (ni sababu ya kukataa). [During delivery] I please them by using good words and I show patience (subira). That is different to the way the women get terrified at the hospital. If you please a women, a women can deliver more easily." (Halima Mahmud, TBA, 16.11.2011)

51 *Masheitani ya ruhani* are Muslim spirits from Arabia (Larson, 2008:66). *Ruhani* spirits are often said to be 'good spirits' (*masheitani mzuri*) serving in the name of Archangel Gabriel (Saleh Shaaban Saleh, healer, 3.12.2011, and Sulaiman Haji Sulaiman, healer, 4.12.2011).

"Women prefer going to the midwives because of the traditional treatment, after giving birth, they stay for seven days and get massages." (Anon., TBA, 8.12.2011)⁵²

The attitudes and behaviour of health professionals in hospitals – described as unfriendly, harrassing, or impatient – contributed to healers' (and patients') negative evaluations of the public medical system. The perceived poor quality of care at government health institutions, however, is not simply due to the practices of individual staff, but is influenced by a range of constraints on health service delivery (Green, 2000:410). These are determined by the institutional structures through which they are operationalised. Inadequate health budgets, combined with high rates of attrition for health workers, mean that the hospitals have insufficient numbers of qualified staff to deal effectively with the large number of cases. Staffing problems are exacerbated by delays in the payment of salaries and inadequate levels of pay:

"To tell you the truth, any place where people are not kept in the way they want it, like getting good salaries, a good standard of living...they are not working properly. [...] They cannot really heartedly do [so], they are hungry, it is true with that harassment at the hospital, I do not want to hide anything [...] but the salaries are low!"⁵³ (Dr. Isimo, head of the gynaecological department MMH, 11.1.2012).

Monetary reasons and the avoidance of surgery

Difficulties in paying for health services was a recurrent topic among both doctors and healers. Healers are often visited by patients who recount long periods of help seeking from various sources without success, and who then interpret the healer's consultation as a 'breakthrough.' This fact contributes to their evaluation of traditional medicine as being more affordable, especially as the use of traditional medicine also includes avoidance of operations that are often associated with fear and/or high costs:

52 The traditional massage given by a TBA to release the placenta was valued highly by patients. As an atomic uterus may endanger a woman's life, these massages can be of great importance (Dr. Nienstedt, 8.12.2011).

53 A midwife working in a governmental institution is paid less than 200,000 Tsh (~124 US\$) monthly.

“There are some diseases in the hospital that can be treated without being operated, [...] for example hemorrhoids or myoma, [...] such things can be treated using herbs. But in the hospital they do an operation. And if patients hear that they can be treated without operation, they rather go to the healer.” (Zahra Hassan Ali, healer, 16.11.2011)

Aside from teeth problems, cancer, myoma, and haemorrhoids, healers claimed to be able to avoid surgical interference for infertility. Infertility was a major – and controversial – subject that emerged in interviews with healers. As shown in the next section, considerations about this ailment and its therapy reflect limitations in the biomedical sector combined with healers’ ability to absorb such health problems. Infertility is also a good example demonstrating the differences in healers’ therapeutic approaches and how efficacy is conceived, rated, and operationalised by them.

4.6. Case study: Infertility

Women’s identity and roles in Zanzibar revolve strongly around child bearing and motherhood. Women also bear the burden of blame for reproductive failure, which may result in stigma, anxiety, and depression.⁵⁴ The effect that infertility can have on women – as well as men – ranges from social pressure to social isolation.⁵⁵

Women’s methods of coping with infertility vary. One approach is an initial consultation for conventional medical treatment. One of the affordable examinations in the hospital is an X-ray photograph of the abdomen (~ 6 US\$). The findings from this examination are often vague, however, as this method is not suitable to show an abnormal structure of the uterus or fallopian tubes, or a blockage that would prevent an egg moving through a fallopian tube to the uterus. Thus, women are often discharged with the diagnosis of ‘nothing found.’ Alternatively, surgery may be done to clear a blockage and/or repair a tube, but this is costly and feared by many women.

54 Dr. Mayasa Salim Ali, chair of the TC, 25.11.2011, and Hidayah Hamad Juma, TU, 23.11.2011.

55 Data are taken from interviews with female patients only. However, it was observed that male patients also searched for help from healers’ who prescribe herbal drugs to increase virility and fertility.

Uncertainty after hospital discharge and unaffordable fertility treatments bring alternative methods into play (see also Kayombo, 1997; Kruger et al., 2011). Furthermore, the permanent social pressure, the experience of personal deficiency, or the fear that the childlessness could be inflicted by others, lead women to seek care from healers:

“Some women are diagnosed not to be fertile, but when they come to me, I treat them well without chemicals or operation.” (Halima Mahmud, TBA, 16.11.2011)

“Infertility does not exist (hakuna mtu tasa). There is a problem with the tubes and I know how to solve that problem.” (Zahra Hassan Ali, healer, 16.11.2011)

“Doctors say we have to learn how to make tests (ni lazima kupata kipimo). But I already have this ability (lakini kipimo nimeshapata). If a woman is infertile, the doctors might look through the X-ray and ultrasound, but without finding anything (wanaangalia lakini hakuna kitu). [...] Then they operate [...] and might lose the patient’s life. [...] Doctors do not know that they [women] might have been bewitched. But if we are involved in finding the diagnosis, we could contribute.” (Prof. Al-haji Ahmed S. Shariff, herbalist, 23.11.2011)

One of the healers’ methods to treat infertility is manipulation of the ovaries. This is done either by hand or by inserting a cloth soaked with herbal medicine into the vagina to remove tubal blockage and make conception possible. This herbal mixture consists of three herbs, of which each was said to have a specific function: to unblock, to treat, and to clean the tubes. Biomedical practitioners, however, criticised this method and emphasised that tubal blockage can never be treated by a healer as tubes are not reachable via vaginal intervention.

Healers also focus on spiritual rituals or the treatment of energy channels. They assume that certain deficiencies and malfunctions lead to poor nourishment of the body and organs; additional disorders such as an ‘excess’ condition can obstruct the organs and meridians. The energy channel can be opened and recovery stimulated by applying firm, deep pressure to certain points on the body with fingers and hands. Infertility counselling, which involves the treatment of women’s emotional well-being and the reading of

the Qur'an, is a core treatment element. During interviews, it was stated to be of major importance that healers express confidence in managing the emotionally and socially challenging problem of infertility:

"I please them, I tell them to use herbal medicine and I tell them that they will get a child if God wishes (Mungu akipenda, utapata mtoto), and I tell them to be patient." (H. Mahmud, TBA, 16.11.2011)

Various studies pertaining to cultural and religious views on (in-)fertility recognise infertility as also being a bio-psycho-social problem (Inhorn, 1994; Gerrits, 1997, 2002; Sewpaul, 1999:741; Upton, 2001; Hörbst, 2006; Chandra et al., 2009:234). Since psychological factors can play an important role in the pathogenesis of infertility, it is assumed that the combination of pronounced confidence may decrease the psychological distress of women. This might explain patients' judgment that traditional practices are efficacious. In addition to this judgement, women in interviews often reported having conceived after healers' consultations. Even if (religious) counselling or spiritual (healing) sessions are occasions where an empirical outcome is difficult to prove, this holistic health approach seems to have strong appeal among patients.

A healer's example: treating infertility with traditional medicine

Dr. Mohamed Said Ali El-Jabiry – better known as Babu Madawa – is a fifth generation traditional medical practitioner in Zanzibar. He was initially trained by his father, but has since continuously redefined and developed his skills himself. Because of his extraordinary knowledge of medicinal plants and their therapeutic utilisation, Babu Madawa is well known among Zanzibaris and foreign researchers. References from successfully treated patients (also foreign) and certificates about the high quality of his herbal products and his profession decorate his clinic at Bububu and reflect his celebrity status. At his clinic, Babu Madawa offers consulting hours for outpatient and stationary treatments. His well equipped clinic, as well as his self-appointed classification as a practitioner (*mtibabu*) – and not a healer (*mganga*) – differentiates

him from other healers.⁵⁶ The same is true regarding his treatment methods. According to him, one of the main obstacles to the full acknowledgement of traditional medicine is the failure to prove its efficacy.

Babu Madawa argued that treating infertility successfully involves the use of biomedical tests, for example to check men's ability to produce healthy sperm:

"If you have a disease, we need to identify it first. A big problem is, if the lady cannot conceive. But in local knowledge [...], they [referring to other healers] say that the patient has some spirits and cannot bring the child. But I say, we need to have proper investigations! I ask them to bring the husband [...] and check the sperm in the lab. [...] We need results and testing machines. [...] When he is coming with the result, I can treat it with herbs." (Dr. Mohammed Said Ali El-Jabiry, herbalist, 17.11.2011)

If a woman has been treated unsuccessfully with fertility drugs, Babu Madawa administers a 'cleansing procedure,' which is common to the repertoire of all healers. With this method, a patient is supposed to get rid of accumulated toxicity – also described as dirt (*uchafu*) – which, he claimed, result from invasive procedures and chemical drug therapies:

"When I get a patient who could not conceive for years, and who got tablets for a long time, [...] we have some [herbal] medication to remove all this, to clean the body. By making the patient vomit and getting diarrhoea. [...] The eggs need to develop and the menstruation can come back after a few months. Some [healers] read the Qur'an but I need the proof of the medication." (Dr. Mohammed Said Ali El-Jabiry, herbalist, 17.11.2011)

Healers' methods and the challenge to identify efficacy

A crucial point throughout the study was the challenge for healers' to identify the precise stage at which efficacy can be assessed. Zanzibar's MoH

⁵⁶ The issue of titles was a sensitive topic among healers. According to the law, traditional healers must refrain from using the title Doctor or Professor, as using these titles suggests that they are conventional medical practitioners (see Part III, Code of Conduct and Practice). As the term *mganga* may refer to both a healer and an orthodox medical practitioner, Babu Madawa advocates for the term *mtibabu*, meaning someone who treats (discussion during training sessions, 29.11.2011).

demands the evaluation and determination of ‘objective truths’ about the effects of healers’ medication through randomised controlled trials. Healers likewise eagerly expressed their interest in measuring the efficacy and medical benefit of their products. This shows that healers may have internalised the pressure and/or they want to conform to government policy in order to be officially recognised (Bruchhausen, 2004:130, 2010:253). Healers also hoped that scientific proof would protect their individual *materia medica* and medical knowledge. Even if existing protections of intellectual property rights were fully applied to traditional knowledge in Zanzibar (as is anticipated by the law), this would not be the only mechanism strengthening and empowering healers. They also hoped for a breakthrough with their own inventive and industrially applicable formulas.

Aside from the contestation to (and potential impossibility of) measuring the effectiveness of healers’ practices, the government has criticised the fact that traditional medicine is not based on ‘rational’ sets of standards or methods.⁵⁷ Healers’ treatment methods hardly allow for the strict control of experiments. The effectiveness of herbs, for example, depends on the interaction and synergy of many unknown biochemical components. In interviews, healers claim that standardised extracts – manufactured for a homogeneous group of patients with standard diseases – are not superior to traditional herbal products.

Additionally, the pressure to provide ‘medical truths’ takes place on an ‘uneven playing field’ (Adams, 2002b:661): healers could hardly compete either financially or logistically with the biomedical sector (e.g., to carry out scientific testing in vivo through double blind procedures) or establish empirical studies and investigate evidence (Etkin, 1988, 1992; Van der Geest, 1997).

Due to the above mentioned constraints, such testing procedures seem unlikely in the foreseeable future. Furthermore, an inherently quantitative understanding leaves little space for patients themselves to assess efficacy. This dilemma was obvious in

57 An anthropological approach regards the (biomedical) knowledge and practice of ‘experts’ as locally variable (see Latour, 1987:144; Foucault, 1998; Lambert and McKeivitt, 2002:211).

the context of *dawa ya suna*, which was evaluated as efficacious by patients but could not be objectively proven due to its nature: it mainly implies the provision of comfort through words and prayers.

The biomedical method stands in contrast to the slow accumulation of experience over many generations, without clear comparison or controls, that characterises traditional medicine (Liverpool et al., 2004:822). Traditional medicine does not measure efficacy in the same way as biomedicine does. Biomedicine has developed specific technology to determine the presence and absence of many pathologies and is prepared to pronounce a cure. Healers, by contrast, may not share the same understanding of physiological processes, and thus biomedical criteria and testing may result in the judgment that a traditional practice is not efficacious. The dilemma, then, is to identify the precise stage in treatment at which efficacy can be logically assessed. Aside from discussions that occurred during this research, the interrelation between traditional medicine and scientific ‘proof’ has a long history within anthropology.⁵⁸ One important aspect of the anthropological debate proves relevant for the findings of this study: the need to place efficacy, sickness, and healing within the proper context:

“Biomedicine is carried out in a rich social and cultural context. (...) It is in that context that medicine produces its effects. No effect can be achieved outside a context, because no one is ever outside a context. If the effects of biomedicine are spectacular (...) these successes are co-produced by that context.” (Van der Geest, 1995:364)

The idea of healing comprehends the social, economic, historical, and cultural context of sickness. Understandings of efficacy are likely to be embedded *within* these broader parameters and may extend well beyond the focus of the sickness itself – that is, the patient. The same applies for determinations of efficacy, which should be seen as shifting within

58 See Kleinman, 1980, 1995; Etkin, 1992; Waldram, 2000; Adams, 2002a+b; Adams et al., 2010; Bruchhausen, 2004; Kirmayer, 2004; Van der Geest and Hardon, 2006. For a deep discussion on the term efficacy, see Young, 1983:1208; Etkin, 1988:300; Nichter, 1992:226. For a discussion on how to evaluate (anthropologically) the efficacy of medicinal plants, see Rasaoanaivo et al., 2004:255ff; Willcox et al., 2011:2ff; Meier zu Biesen, 2012.

specific sickness episodes, and more generally within different medical traditions. Medical effects are surrounded by symbols, beliefs, social expectations, experiences, and emotions. Thus, the evaluation of efficacy has to be seen as something that is essentially negotiated in (often multiple) encounters between patients and practitioners, in both biomedical and traditional medical systems (Waldram, 2000:604).

4.7. Traditional healers' views: how to establish collaboration with biomedical doctors

Three healers reported to have experienced instances of collaboration with doctors: they were involved in awareness campaigns, such as those run by the national HIV program in 2006.

According to healers, one of the main obstacles to collaboration is that secrecy (e.g., with regard to the ingredients of their medicines) is an intrinsic aspect of traditional medicine that healers will not easily sacrifice. Healers claimed that doctors do not accept this secrecy but instead interpret it as a lack of scientific transparency.

Referral criteria

So far, there is no formal mechanism of referral between biomedical and traditional health care practitioners in Zanzibar. The majority of healers, however, claimed to have referred patients to doctors according to the following criteria:

- Emergency cases (such as uncontrolled bleeding, unconsciousness)
- Dehydration
- For disease patterns such as anaemia, hypertension, TB, HIV/AIDS, mental health problems, heart problems, infertility, and muscular pain

In contrast to physicians, most of the healers described their methods as being limited. The wish for advanced training (*mafunzo*) and further education (*elimu*) was consistently expressed:

"We are hungry for education (tuna njaa ziko kichwani)." (Machano Suleiman Omar, healer, 23.11.2011)

"The remedy for the brain is education (dawa ya akili ni taaluma)." (Sulaiman Haji Sulaiman, healer, 4.12.2011)

"Education is unlimited (elimu haina mwisho)." (Ali Haji Rajab, healer, 15.11.2011)

In particular, healers requested training in:

- Examining (*kupima*) patients for malaria and high blood pressure, among others;
- Using medical instruments such as a stethoscope (*chombo*);
- Learning how to carry out episiotomy (*kuongoea njia*) and to make sutures;
- Gaining knowledge on epidemic diseases (diagnosis, prevention, and treatment).

Fears of and prerequisites for collaboration

As healers have experienced a lack of governmental recognition and support for several decades, and as biomedicine has enjoyed far greater official acceptance, healers feared that collaboration could be dominated by medical doctors. As traditional knowledge and the biogenetic resources of healers have been deemed of commercial value by governments, healers also feared exploitation and were insecure regarding their property.⁵⁹ This was expressed by proverbs and metaphors:

"Alikutafuna nyoka ukiona ukikugonga ukuti utash-tuka. (Once bitten, twice shy). We were beaten, [...] I am afraid that the priority of treating patients will go to the hospital, rather than to our [healers'] side. I am afraid that I might lose patients because only when medical doctors fail, I will be consulted, but not as a first choice!" (Machano Suleiman Omar, healer, 23.11.2011)

"Unyanyasaji na unyonyaji unatuogopesha." (If the government is around, I will be suppressed and others will get the appreciation). (Healer's statement during training session, Unguja, 28.11.2011)

"They will use me as a ladder for them to go up, if there is an apple up there, a medical doctor will stand on my shoulder, pick that fruit and eat it by himself— while I am waiting." (Healer's statement during training session, Unguja, 29.11.2011)

⁵⁹ Healer Mohamed Said Ali El-Jabiry also expressed his disappointment after having welcomed foreign researchers. They conducted field research in his clinic and gained a PhD afterwards, while he himself had no benefit, 28.11.2011.

“The government as well as people in the hospital neglected us formally (serikali kama hospitali wametutupa). I am still claiming that the government should recognise us. This collaboration should be achieved so that we can contribute fully, not hiding, without being embarrassed, without finger pointing, without limits. We also feel that the government is taking our knowledge for their own benefits only, we are hesitant to give them the knowledge, we are afraid that there is no balance.” (A. Abubakar, healer, 15.11.2011)

“I am welcoming the cooperation together with biomedical doctors, [...] there is some benefit, but I am afraid of it. I feel that biomedical doctors think that they won't get anything from us healers. They might not be interested in being with the healers, because the doctors [...] work scientifically, they might think that the healers might not bring something in. I am predicting my fears.” (Maulit Kibwana Maulit, healer, 16.11.2011)

“Regarding the government restriction, we should not say that we are able to heal a patient, we are just helping. I am not happy to say that I am treating only, but I am happy to say that I am trying to heal and we will see the consequences afterwards. I am proud of what I am doing.” (Zahra Hassan Ali, healer, 16.11.2011)

“All the biomedical scientists have education (elimu), they all have their degree, up to PhD. The healers [...] are looking for the prestige that they are missing, the doctors are proud on their side, while the healers are not educated. [...] This segregation should be abolished first, and then we will come to the time that we are one. We should count ourselves that we all have the power to heal.” (Haji Juma Msanif, healer, 16.11.2011)

Additional concerns that healers expressed in this context were:

- Losing patients, losing reputation;
- Income imbalance (fear of being underpaid);
- Educational imbalance (fear of being ignored);
- Hierarchy imbalance (being ‘the executive’ (*mtindaji*), while doctors are ‘the boss’);
- Intellectual property (fear of disclosing knowledge without benefit and recognition).

All healers nevertheless confirmed their readiness to cooperate with doctors. Just as with the biomedical doctors, Muhimbili Hospital in Dar es Salaam was mentioned as a model. Collaboration was imagined in the way that patients could choose between

a range of treatment options, including traditional medical modalities. Healers also imagined being able to use biomedical tests, on the basis of which they could recommend herbal formulas to reduce or eliminate symptoms.

“The challenge is that, myself and most of the healers, they would be more comfortable if there is a written contract, that they will be together with the government even though for the benefit of the patient, otherwise we will feel like we are wasting our time. The contract should be in terms of finances. We want to be financed through the MoH or an NGO, we want to be employed with a proper working contract not only being told: ‘Okay you [healer] come here today or tomorrow, do this and do that.’” (Machano Suleiman Omar, healer, 23.11.2011)

“We need seminars, which will be attended by herbalists and biomedical doctors. But that seminar should be introduced by mediators to show the gap. This is touching political issues, it has something to do with policy and the hierarchy above. I mean the politicians should give a go-ahead, especially you foreigners [pointing towards us, researcher and NGO member] have to come, it is not the local people who can induce that and convince those people. We [healers] have tried, they [government] have tried. Yet, only the Act went through but nothing more, now it needs the middlemen to convince the politicians, that we need both, herbalists and biomedical doctors in the public health system.” (Prof. Al-haji Ahmed S. Shariff, herbalist, 23.11.2011)

Like biomedical doctors, healers also thought about the preconditions for a fruitful cooperation:

- (1) Healers should be admitted to the official health care system and receive permission to enter hospitals to treat patients.
- (2) TBAs should get a practice license.⁶⁰
- (3) MMH should establish a ward for traditional medicine.
- (4) Healers should establish a hierarchy within the hospital (e.g., senior herbalist, director of planning/treating with traditional medicine).
- (5) Healers should be involved in treating/advising patients.
- (6) Healers should be supported with (governmental, external) funds to build offices/traditional clinics.

⁶⁰ The governmental registration of TBAs is highly controversial as they are accused of being incompetent by some governmental representatives.

- (7) The MoH or external NGOs (e.g., World Doctors) should be involved as mediators.
- (8) Collaboration should be supported by written contracts between healers and doctors.
- (9) Healers' salaries should be paid by the MoH.
- (10) Healers' *materia medica* should be pharmacologically analysed.
- (11) Spiritual diagnostic tools should be recognised by doctors/the government.

The first steps for institutionalised collaboration were taken with the training sessions that were organised, within the framework of this study, by World Doctors and the TU in November and December 2011.

4.7.1. Efforts to foster collaboration between healers and biomedicine: training sessions

“There is the government, the MoH, the Traditional Unit, and us. We have to work together; our aim is to give people relief, to treat the same people. [...] People are going to the healers and [...] to the hospital, we need to understand that we need to stay together.”
(Mohammed Said, herbalist, 17.11.2011)

In the course of the research project, six training sessions (28-30.11.2011; 5-7.12.2011) were conducted by the TU in order to raise awareness among healers about registering themselves with the MoH, and in order to train them on ethical codes of conduct. All training sessions were financed by World Doctors. On Unguja, sixty out of ninety invited healers (nineteen women and forty-one men), and on Pemba eighty-five out of ninety invited participants (twenty-seven women, fifty-eight men) took part in the one-day training sessions. During these training sessions, TU members emphasised their support for and validation of traditional medicine and their plan to make sustained efforts to support the traditional health sector, for example: through the evaluation of traditional medicine remedies; in spiritual aspects of healing; the prevention and care of chronic diseases; the standardisation of processing; in hygienic preparation; in the storage and packaging of traditional medicines; and the protection of intellectual property rights. The key issues during discussions included:

- Benefits/disadvantages of being registered;
- Benefits/disadvantages if collaboration with biomedical practitioners was realised;
- Cross-referral systems between doctors and healers;
- Disclosure agreements and patent rights;
- Uncontrolled (massive) exploitation of medicinal plants;⁶¹
- Methods for measuring the efficacy of traditional medicine;
- Differences between alternative and traditional medicine;⁶²
- Ethical issues, malpractice, codes of conduct.

The latter point was perceived as crucial, since it was ethical issues, sexual harassment, as well as practices involving witchcraft, which had led to the government's decision to set up the legislation on traditional medicine in the first place.⁶³ Thus, the following practices and their negative consequences (for patients and healers) were discussed by healers and MoH representatives during the training sessions:

- Abortion (*kutoa mimba*);
- Female genital mutilation (*tohara kwa wanawake*);⁶⁴
- Extraction of teeth (*maeno ya kubandika*);
- Prescription of biomedicine through healers/mixing medicines (*kutumia dawa za kisasa peke yake ama kwa kuchanganya*);
- Administering of traditional remedies via injection (*kutumia dawa za asili za sindano*);

61 The exploitation of naturally growing or wild plant species raised concerns at the training sessions regarding the sustainability of exploited species. Some healers suggested that important species should be domesticated and that only plant leaves (and not the roots) should be used.

62 The law makes a distinction between alternative (*dawa mbadala*) and traditional (*dawa ya asili*) medicine (e.g., codified and non-codified medicinal expertise). Alternative medicine systems include internationally established structures such as Traditional Chinese Medicine, Acupuncture, Food-supplements (e.g., *TLASHI* products from China), and the Ayurveda system found in India or Homeopathy in Europe. Healers are asked to perform according to the standard of alternative medicine. However, they claim to have practiced for decades at a high standard but without having had the possibility to prove it via official certificates.

63 The enactment of the law was triggered originally due to a family claim in which parents accused a traditional healer of having sexually abused their daughter during therapy (H. Shariff and H. Bonde, representatives of the MoH&SW and TU, 1.12.2011).

64 This practice is listed in the Act; however, all stakeholders confirmed that it is not practiced in Zanzibar.

- Administering of anaesthetic/narcotic substances (*kutumia dawa za kisasa za usingizi/dawa za kulevyi*);
- Use of medicines made from parts of the human body/organs (*kutumia dawa ambazo ni sehemu ya mwili wa mwanadamu, e.g., unga wa ndere⁶⁵*);
- Sexual abuse (*unyanyasaji wa kijinsia*);
- Involvement of practices that induce witchcraft (*kushiriki katika shughuli za imani za kishirikinal uchawi*);
- Uvulectomy (*kukata kilimi*).



Healers during training sessions

Heatedly discussed were healers' perceptions towards – and practice of – uvulectomy (*kukata kilimi*), which is a traditional surgical practice that can result in severe complications (Manni, 1984; Katz, 1989). As the (partial or complete) removal of the uvula is also practiced by doctors (although considered obsolete), healers defend themselves and their practice of performing uvulectomies explicitly at patients' requests. They also claimed the safe mitigation of symptoms using this method and rejected antibiotic treatment as inappropriate for enlarged infected uvula. The government, however, wants to ban the practice of uvulectomy, which is considered both unethical and life threatening.

During the training sessions, some healers accused doctors' use of 'unnecessary operations,' the harassment of patients at hospitals, and the side effects of biomedical therapy as constituting abuse of

patients. These healers expressed reservations about the biomedical health sector in general, though this could likely be rooted in their discontent at being accused of malpractice by government institutions, which might have pushed them into a defensive position. They argued that malpractice was only ever perceived as being committed by healers, while regrettable mistakes could happen everywhere, even in biomedical institutions:

"There is malpractice happening in the killinge [healers' place of practice] or anywhere. It is provoking the government (serikali), but it is also happening in their hospitals or private clinic. Those things happen, but to us, even if it just happens that one healer is malpracticing, all of us are condemned." (Maulit Kibwana Maulit, healer, 16.11.2011)

"Many dangerous things in Zanzibar are allowed by the government (watu wa serikali) because of taxes: cigarettes and alcohol. Tobacco is one of the most dangerous plants, but it is existing in the shops, alcohol is allowed by the government, but no Act has been established on that!" (Healer's statement during training session, Unguja, 30.11.2011)

"The biomedical doctors say: 'Do not use drugs in combination with herbs!' But it is the hospital and the dispensaries who sell the drugs to the patient, not the healer! Those who sell drugs to the healer should be blamed first." (Healer's statement during training session, Unguja, 29.11.2011)

"Health seeking delay is also a consequence of patients' choice themselves, not only healers. Side effects of herbs do not necessarily come from the healers, but also from patients themselves. They take their own treatment and then come to the hospital in a serious stage. We are blamed, but mixing of medicine comes from patients themselves." (Healer's statement during training session, Unguja, 28.11.2011)

As introduced above, governmental representatives, doctors, and traditional healers differed in their views on healers' expertise as well as practices. Both sides expressed their doubts about and reservations towards the other health care system and defended their respective field of expertise. Both sides also appreciated the beginning of a dialogue and the sharing of experiences in treating patients.

65 *Unga* (powder) *wa ndere* contains powdered parts of a dead human body, preferably the skin and bones of a newborn. Ten grams of the powder are traded for 100,000 Tsh (~ 62 US\$).

Conclusion

This chapter provided insight into practices that take place outside of Zanzibar's official health care sector. The motivations that healers gave for patients' seeking traditional medicine partly overlapped with doctors' experiences: unsuccessful treatment with biomedicine; feeling harrassed in hospitals; as well as monetary and socio-cultural reasons. All healers expressed a strong interest in gaining more knowledge and in collaborating with representatives of the public health care sector. As doctors, specific preconditions – mainly related to their institutional betterment – were mentioned in this regard. In contrast to doctors, however, healers expressed fear of becoming subordinated in the process of establishing collaboration. This fear is closely linked to healers' limited economic resources on the one hand, and the hierarchy of knowledge among doctors and healers on the other.

The following chapter applies to patients and their health seeking behaviour. As will be shown – and as already indicated by doctors and healers – patients create a medical syncretism that has implications for the management of disorders and compliance with therapy, rehabilitation, and medical regimes.

5. Patients' health seeking behaviour

So-called 'treatment seeking behaviour studies' acknowledge that understanding the complexity of human behaviour is a prerequisite for improving health practices (Hausmann-Muela et al., 2003:3). They show that patients navigate between different modes of treatment and healing, and use the different modes with regard to the greatest benefit to their own (health) needs (Leslie, 1980; Feierman and Janzen, 1992; Nichter, 1992, 2002; Lock and Nichter, 2002; Muela et al., 2002; Dilger, 2005, 2012; Obrist van Eeuwijk et al., 2007). As demonstrated in the following, there is a wide range of factors that influence people's healing choices in Zanzibar.

Socio-cultural profile of participants

Sixty-four percent of participants completing the questionnaire (n=100) were female and thirty-six percent male. The majority (90%) of the participants were Muslim (female n=58, male n=32) and the remaining ten percent Christian (female n=6, male n= 4).⁶⁶ The following graphs present the distribution of work, educational background, and the place of residence of participants. Place of residence is divided into three areas: urban, urban-west, and rural. Information on low, middle, and high income refers to the area in which people lived.⁶⁷

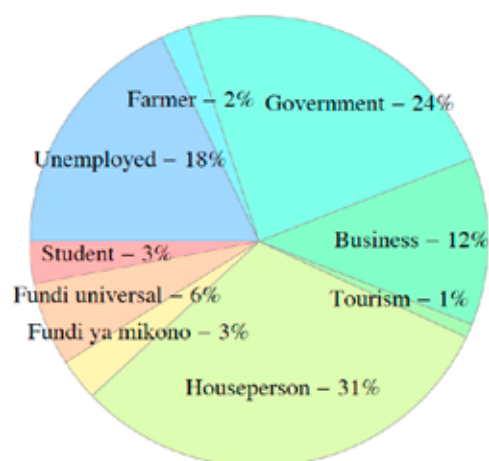


Figure 2: Distribution of work

⁶⁶ This distribution correlates to the overall religious distribution in Zanzibar, with Islam being the predominant religion (96%).

⁶⁷ Income levels correlate with expenditure at household level and across geographical areas. For the information given on low/middle/high income, however, specific margins of income are not known.

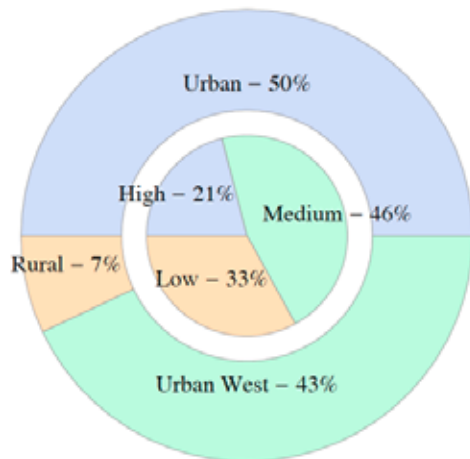


Figure 3: Distribution of regions and income

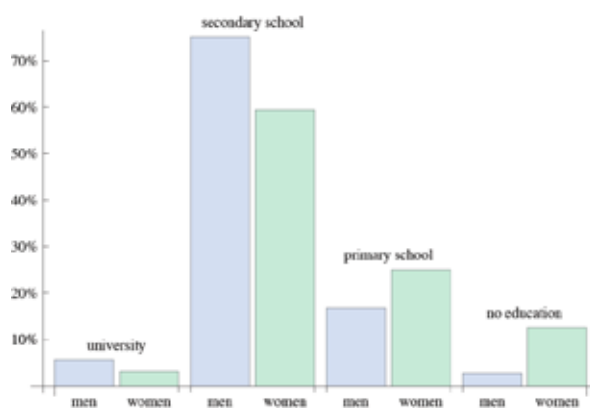


Figure 4: Educational backgrounds

As seen above, the proportion of secondary school graduates among participants was high. According to the Zanzibar Strategy for growth and reduction of poverty plan (2010:36ff), forty-three percent of women and forty-one percent of men have at least attained secondary education in Zanzibar. Overall, eighty-four percent of women on Unguja have been to school compared to sixty-eight percent on Pemba. According to the Zanzibar Education Development Programme (ZEDP), primary education is close to one hundred percent in Zanzibar.

5.1. Patients' usage of biomedicine

Ninety-seven percent of all participants reported that they had been to the hospital at least once in their lives.

Interviews revealed that illness episodes tend to follow a certain pattern. Patients reported that after falling ill, they often wait a couple of days to see whether or not they get better. If their condition gets

worse, they start initial treatment at home (on self-treatment see Van der Geest et al., 1996:165; Kleinman, 1980:51; Feierman, 1985; Van der Geest and Hardon, 1990; Bright and Taylor, 1999; Petryna and Kleinman, 2006:17; Granado et al., 2011:113). If the illness persists, patients usually engage in the search for a more specific diagnosis (cf., Hausmann-Muela et al., 2003:407). Different aspects of diseases are addressed separately through specifically targeted therapeutic interventions, involving the use of both traditional medicine and biomedicine.

Common in the locally used terminology was the differentiation between 'diseases of the hospital' or 'normal health problems' (*ugonjwa wa kawaida*) on the one hand, and 'local diseases' or 'traditional health problems' (*ugonjwa wa kienyeji*) on the other. Consequently, the treatment also has to apply biomedicine or traditional medicine respectively, as confirmed by a patient:

Patient: For more than ten years I had malaria and stomach problems. Several times, I went to the hospital, but without any success. Doctors did not treat me successfully, so I had to find an alternative (kutafuta mbadala), and that is certainly the healer.

CM: What is the difference between a healer and a medical doctor?

*Patient: The biomedical doctor is able to make tests, but a healer cannot make medical tests. But a healer knows the source of the disease. For example bad accidents. The doctor can say that the accident causes a certain complication. But a healer knows why the accident happened and can know if and when someone got bewitched [and consequently had an accident]. Healers are using other means, it is difficult to find out advantages of healers, there are rather differences in diseases. There are diseases for the healer (*mgonjwa kwa mganga*), diseases for the hospital (*mgonjwa kwa hospitali*), and diseases that can be treated by both...*

CM: ...for example?

*Patient: Bewitching issues (*mambo ya uchawi*) can't be treated in the hospital. Also, if a patient ate something wrong, he needs a healer who can get rid of the bad meal [referring to traditional cleansing practices]. Kidney or heart problems can only be treated in the hospital, not with traditional medicine (*huwezi kutibu kwa dawa ya Kiswahili*). Women (*wanawake*) can be treated at both places, a maternity ward and a healer. Also fractures can be treated at a healer and a doctor. (Patient, m., 34 years, 21.12.2011)*

Since ‘traditional health problems’ may have symptoms that overlap with those perceived to result from ‘biomedical disease,’ complex treatment strategies usually evolve (Oberländer and Elverdan, 2000:1353; Whyte et al., 2002:39).

‘Hospital diseases’

In our research we asked about what patients would consider to be the most competent treatment for different types of diseases, either in the hospital or at a healer. As illustrated below, services around maternal health, i.e. ante- and post-natal care, including delivery, were claimed to be most effectively dealt with in hospitals, while infertility problems were the complication for which the fewest patients said that they would seek biomedical health care. Among the ‘other diseases’ that were said to be treated best at a hospital, patients mentioned strikingly often orthopaedics (n=15), followed by traumatology (n=5), and the conducting of laboratory tests (n=3).

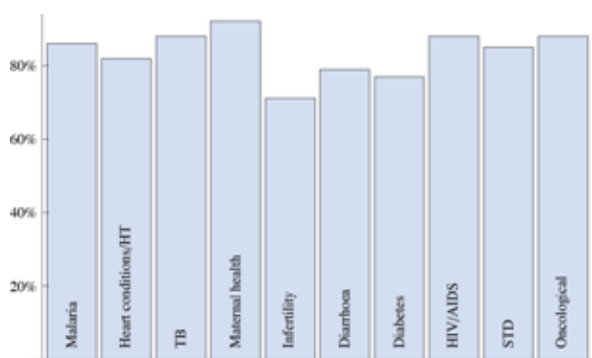


Figure 5: ‘Hospital diseases’

Healing choices

There is no uniform sequence determining the order in which specialists in either sector are consulted. In particular, patients suffering from chronic diseases and/or conditions which did not respond well to a certain treatment seemed to more frequently mix and combine their healing strategies. As the following patients’ illness narratives demonstrate, it is not unusual for patients to switch between various healers and biomedical doctors until they recover or give up.

Patient example: Izma

Izma, who suffers from diabetes, started to consult with a herbalist in order to regularly check her health

status and receive traditional treatment, which she considered as the better choice:

“Those days, I am checking my sugar (sukari), pressure and HB [hemoglobin level] here [at the traditional clinic] because [] [a healer] advised me to do the tests. I also had severe abdominal pain for three years but that needs to be treated in the hospital. [...] I prefer taking traditional medicine (dawa ya asili) more than modern medicine because pharmaceuticals (madawa za chemical) have side effects (madhara), they are harmful for the health. [...] Also, in terms of customer care, a traditional clinic is better. Last week, I went to the hospital early in the morning, but until afternoon I did not get the [HB] testing and when I finally could enter the doctor’s room, they said that the testing machine was broken. [...] The costs for the medicine are almost the same, but at a healer you can take half of the medicine and return. In the hospital you have to take all medication at once.” (Patient, f., 50 years, 21.12.2011)*

Patient example: Bahira

Bahira, thirty-seven years old, had been sick for two years, suffering from a combination of fever, stomach problems, weight loss, and fatigue. The symptoms persisted until 2007, when she took an HIV test at MMH. After a seropositive result, she ran through a range of treatment strategies (including herbal remedies) mainly to tackle her opportunistic infections. A breakthrough came with her involvement in the hospital’s CTC, where she received counselling sessions and ARV treatment, both of which gave her new physical strength and confidence:

Bahira: In the beginning, I felt nervous to enter the hospital, but the nurses [of MMH] and peer educators take good care of us. They counsel us before entering the doctor’s office, so that we can become open. [...] Until today, I proceed well with my [ARV] medication (natumia dawa zangu vizuri). We patients stay together at the CTC and know that we have the same ailments [...]. Today, I am a peer educator myself and I help others to live with hope (kuishi kwa matumaini).

CM: What advice are HIV patients given in regard to the usage of traditional medicine?

Bahira: There is the famous Babu Loliondo⁶⁸ [from the mainland], people get a cup (kikombe cha Babu) of his [herbal] medicine as a treatment. Many HIV people want to recover but the patients do not get better. There

68 On Babu Loliondo’s fame and ‘miracle cure’ in Ngorongoro District, see Mackenrodt, 2011:167.

is also Babu Madawa [Unguja]. Many patients go there to get relief. They believe that they will be healed, but the opposite is the case. The virus is just sleeping and they will be brought to death. In my opinion, we [HIV patients] should not mix herbal remedies. I am strict and I counsel the other patients and tell them not to stop taking ARVs. (Patient, f, 37, 21.12.2011)

Patient example: Malak

Malak, forty-nine years old, was deaf and could only communicate through lip reading. She reported that after suffering from chronic malaria for several years, an overdose of Quinine had caused her acquired deafness:

“For six years, I had severe and chronic malaria. In the hospital [MMH], they were always testing me and gave me [antimalaria] tablets. One day, I got a drip [Quinine injection of 600mg] and was discharged afterwards. When I had a relapse, I returned to the hospital and again they gave me Quinine [600 mg]. Since then, I have problems with my ears.” (Patient, f, 49, years, 23.12.2011)

Due to lack of human resources and funds, the discharge of patients without proper follow-up (in Malak’s case a second malaria test would have been required before discharge) is commonly practiced in Zanzibar.⁶⁹ Malak continued to feel unwell after being discharged from MMH and lost faith in the hospital as a safe place to be cured. Since this experience – combined with her bad memories of the malaria treatment resulting in severe side effects – Malak claimed that she now only seeks traditional health care.

Factors influencing compliance with biomedicine

Study results reveal that although patients with chronic diseases were motivated to take medication, they experienced constraints such as lack of drug availability, high costs, side effects, and lack of appropriate counseling. In summary, the following reasons negatively influenced patients’ compliance with biomedicine:

- Short consultation episodes with doctors or hospital staff, and long waiting times;⁷⁰
- Feelings of harassment;
- Being isolated in an unfamiliar environment;
- Side effects with biomedical drugs;
- No benefit from biomedical drugs;
- No opportunity to express one’s own concerns;
- Receiving medicine without any explanation of its expected effectiveness and without instructions for proper drug taking;
- High costs.

Treatment interruption

A crucial question during research was whether and why patients interrupt their biomedical treatment, which is demonstrated in the following graph:

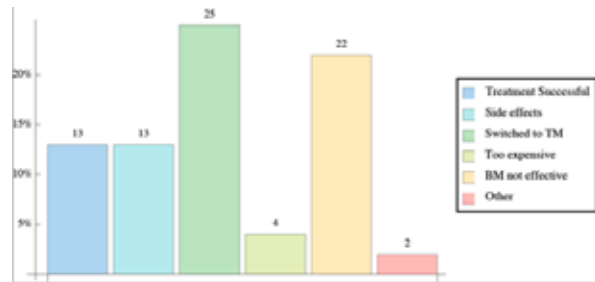


Figure 6: Interruption of biomedical treatment among all subgroups

Forty percent of all participants stated that they had interrupted treatment with biomedicine at least once in their lives. Data on treatment interruption by disease could not be surveyed as patients were reluctant to share this information due to the short encounter with the researchers.

The most frequent reasons given for biomedical treatment interruption were the usage of traditional medicine (n=25) and the experience that biomedicine was not effective (n=23). Other reasons for interruptions were patients stating that they had been cured before finishing the biomedical treatment (n=13) or that they had experienced side effects (n=13).⁷¹

⁷⁰ Consultations are often less than five minutes, and sometimes come after a patient has queued for the whole day (this refers particularly to government hospitals). Private hospitals offer fast track services (*buduma baraka*) for additional charge.

⁷¹ Multiple answers were possible. For the preformulated answer ‘other reasons,’ four respondents (n=4) stated that biomedical treatment was not beneficial, that they did not like chemicals, or that they used the Qur’an first.

⁶⁹ Said Yussuf Said, TU and pharmacist MMH, 23.12.2011.

5.2. Patients' usage of traditional medicine

Sixty-eight percent of respondents said that they had used traditional medicine at least once in their lives. Of participants who used traditional medicine, six percent were Christian and ninety-four percent were Muslim. Furthermore, this group included:

- 100% of university graduates;
- 66% of secondary school graduates;
- 68% of primary school graduates;
- 78% of those with no education;
- 70% of those living in low income areas;
- 70% of those living in middle income areas;
- 65% of those living in high income areas.

Among the thirty-two percent who stated that they had *not* used traditional medicine:

- Fifteen did not give a reason;
- Three said that biomedicine was effective enough;
- Four said that they felt uncomfortable with traditional medicine;
- Three said that they did not have health problems;
- Five said that they always go straight to the hospital;
- One said that there is no treatment in traditional medicine;
- One said that traditional medicine is too expensive.

Treating children with traditional medicine

One hundred percent of participants with children (n=72) had used traditional medicine to treat them. Very common in Zanzibar is a preventive practice called *jimbo* (where a newborn is plunged into a bath of mixed herbs) or the usage of a charm (*berizi*), which consists of a piece of cotton and folded paper with a bundle of small roots inside.

'Healer diseases'

In correlation with the health seeking behaviour at hospitals, we asked patients about what kind of disease treatment they considered traditional healers to be competent in. In general, biomedicine was seen as the better option for treating all kinds of diseases. Respondents did claim that healers were capable of treating complications related to infertility, diarrhoea, and diabetes, but were less capable in treating TB and sexually transmitted diseases (STDs). Among the 'other diseases,' our respondents thought

that healers had specific skills in dealing with spiritual issues (n=22), followed by mental health problems (n=6), and gastrology (n=3).

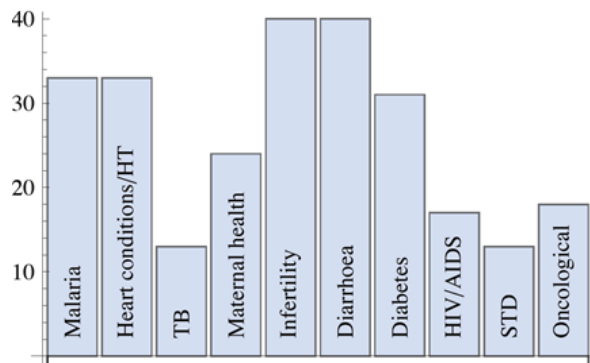


Figure 7: 'Healer diseases'

Comparison of the diseases considered to be best treated with either biomedicine or traditional medicine reveals that maternal health as well as oncological problems were thought to be treated most effectively with biomedicine. Infections such as HIV/AIDS, TB, or STDs were also considered best treated at biomedical facilities. For infertility, diabetes and diarrhoea, people considered seeking treatment at places other than in hospitals:

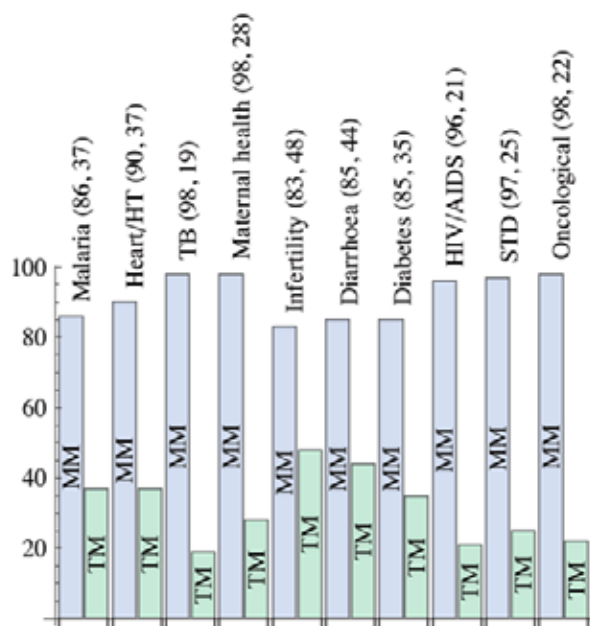


Figure 8: Comparison of diseases treatable with biomedicine (here labelled as 'modern medicine' and traditional medicine)

Usage and acceptance of traditional medicine

The main reason for patients to use traditional medicine was confidence in receiving reliable treatment (n=64). Other reasons quoted by the interviewees were:

- To prevent a disease (n=35)
- Reputation of a certain healer within the community (n=32)
- Spiritual reasons (n=29)
- To find the source of a disease (n=28)
- Because biomedical doctors failed (n=22)
- Other reasons (n=2)

Eighty-four percent believed that traditional healers help people (*wanasaidia watu*) and seventy-one percent answered that traditional medicine is accepted by their religion. Twelve percent of participants stated that they had been referred to a healer by a biomedical practitioner. *Vice versa*: twenty-seven percent reported having been referred to the hospital by a healer.

5.3. Payment of medical services

All forms of treatment require payment – either in the form of gifts (*zawadi*), fees (*ada*), cash payment (*gharama*), or in kind, such as goats, chickens, or cows. In any case, the direct as well as indirect costs (e.g., transport, special food) for medical treatment – both biomedical and traditional – are often substantial (Green, 2000:414; Hausmann-Muela et al., 2003:32).

While costs for various modes of treatment and healing may be high in *all* sectors of health care, the amount patients reported paying in Zanzibar varied *within* different healing sectors and according to the status of the respective specialist. Fee levels also varied according to patients' health problems. A healer consultation could be free of charge (reported by patients with a close relationship to the healer), it could be as expensive as biomedicine (*bakuna tofauti*), or it could be perceived as very expensive – and even more costly than consultations at biomedical facilities (Labhardt et al., 2010:1104). This applies especially to spiritual healing rituals, as they usually last several days and include payment for the food, professional musicians, gifts for the spirits, and the healer's salary. In total, patients may have to pay between 600,000 and 1,000,000 Tsh (~ 600 US\$) for one ritual ceremony.

According to research observations, traditional healers often ask patients to pay for each stage of treatment. Some healers display payment lists in their consultation room or paint fixed prices on their walls to inform their patients in advance. Patients often bring a token payment to their first consultation with a healer. The final payment is then negotiated between the patient and practitioner after the treatment is completed. A patient expects to pay less for an unsatisfactory outcome than for a successful result, or at least an improvement of complaints. Special services may be charged additionally in case the treatment involves laborious work, such as collecting the medicine in the bush (*kuchimba dawa*). The common practice of healers asking patients to pay 'whatever (s)he can' was strongly criticised by government representatives as unjust as it often leads to an overpayment.

Costs and charges in the biomedical sector are also variable, depending on the source and type of treatment. Some private practitioners charge for drugs and equipment, and patients pay every time that treatment is received. At MMH, patients often have to purchase their own drips, drugs, or dressings from the attached pharmacy. They also have to provide their own food and bedsheets/clothes. Some patients reported being asked for direct payments to staff.

According to the quantitative questionnaire results, the average payment for the last hospital visit⁷² was approximately 15,000 Tsh (~ 9 US\$), while the average cost for the last traditional medicine treatment was approximately 6,000 Tsh (~ 4 US\$).

Level of income according to region	Mean payment in Tsh	
	BM	TM
High	19,450 (~12 US\$)	19,200 (~12 US\$)
Medium	16,155 (~10 US\$)	4,483 (~3 US\$)
Low	17,115 (~11 US\$)	7,250 (~4,5 US\$)

⁷² People were asked whether treatment took place in a private or governmental hospital. The majority said that the last payment took place in a governmental hospital (n=60).

Results show that among people living in high income areas, there was no difference in terms of the amount they spent for biomedicine and traditional medicine. The main difference between the costs paid for traditional and biomedicine were observed among people living in middle and low income areas.

5.4. Patients' views: should doctors and healers collaborate?

“The primary diseases should be treated with traditional medicine and the advanced ones at the hospital. We have to start with visiting the traditional health workers and look how they are treating patients and whether they can agree with medical doctors.” (Patient, f., 36)

“The acceptance of healers in the society is 50/50 (wengine wanakubali, wengine hawakubali). There should be collaboration in such a way that doctors and healers refer each other to their places.” (Patient, m., 50)

“A collaboration would be nice, but everyone claims to know more than the other. Everyone is superior, the biomedical doctor is supposed to be the one who knows everything, and the healer as well, that is the challenge for getting them together.” (Patient, f., 51)

The final part of the questionnaire asked for patients' attitudes towards collaboration between healers and doctors. Patients could tick two out of four answers and thus indicate their priorities:

- 66% wanted healers and doctors to establish a collaboration;
- 63% wanted the government to conduct more research on traditional medicine;
- 35% wanted healers to be more recognised by the government;
- 35% wanted healers to improve their performance.

As the study revealed, people in Zanzibar usually try a variety of remedies in order to resolve their health problems. If none of these medicines work, patients – or people in their immediate surroundings – consider whether their problems might be caused by spirits. Spirits, however, are not the only reason why people experience illness or suffering. Sorcery or different sorts of *dawa* used by others in order to inflict harm may be found to be the reason; an evil eye (*kijicho*),

bad luck (*nuksi*), or covetousness (*choyo*) may also cause suffering. If these latter causes are found to be the case, a specialist has to provide protection (*kukinga*) against further attempts at destruction (Larson, 2008:84). In any case, traditional spiritual practitioners have been alleviating different diseases of the population of Zanzibar for centuries (Larson, 2008). As presented in the following case studies, the spirits involved may represent both the cause and the recovery of an illness.

5.5. Case study: Spiritual healing in Zanzibar



Spiritual healing ritual

The phenomenon of spirit possession is widely discussed within anthropology (Lewis, 1971, Giles, 1987; Stoller, 1995; Behrend and Luig, 1999). Aside from the variation in terms of spirit possession in various cultural contexts, there is an overall understanding that spirits and spirit possession concern health, illness, suffering, and healing (Larson, 2008:5).

In Zanzibar, spirit beings are recognised in orthodox Islamic doctrine and form part of the Islamic cosmology. Spirits are – like human beings – created (*umbwa*) and sent to earth (*teremshwa duni-ani*) by God. Most people in Zanzibar who participate in rituals do not see a contradiction between an almighty God and spirits, nor between being a good Muslim and the acknowledgment of spirits (Larson, 2008:45ff). People who do *not* participate in spiritual rituals would argue that it is morally unacceptable to accommodate and celebrate the inhabiting spirits. The spirits they hold have to be exorcised (*kutolewa*) by a *shehe* (religious leader) or *mwalimu*

(person learned in Qur'an). Other sorts of spirits that have to be exorcised are witch spirits sent by another person (Larson, 2008:8). However, during rituals, spirits are usually not exorcised but rather pleased and welcomed, so that a relationship can be established (*kutengenezwa mahusiano*) between a person and a spirit.

Spiritual rituals (*ngoma ya sheitani*⁷³) are understood as being curing rituals. They may be categorised as 'performing medicine' (*kufanya dawa*) and the ritual itself as being 'the hospital' (*hospitali*). The rituals are performed in order to satisfy and please a spirit, so that the spirit in question will stop inflicting harm on the person to whom it is attached. Spirits usually cause suffering in their hosts when they expose themselves for the first time or whenever they are dissatisfied with the behaviour of their hosts, labelled as seats (*kiti*) (Larson, 2008:42). Embodying spirits is not an uncommon experience in Zanzibar, nor is it restricted to people who act as spirit mediums, but is rather something that everyone can expect to experience during his/her lifetime (Larson, 2008:45). Spirits interfere in and influence the lives and relationships of human beings in different ways. They are known to them in their daily life, but they also cause illness, suffering, and misfortune (Larson, 2008:78; Parkin, 2006:704; Mackenrodt, 2011). The most famous spirits in Zanzibar are Christian spirits from Madagascar (*masheitani ya kibuki*), Muslim spirits from Arabia (*masheitani ya ruhani*), Christian spirits from Ethiopia (*masheitani ya habesha*), and Pagan spirits from Pemba (*masheitani ya rubamba*) (Larson, 2008:66ff).

As the following cases will show, disorders arising from spiritual disturbances may create disequilibrium expressed in physical and/or mental distress. The cases also reflect the ubiquitousness of spirits and spirit possession in Zanzibar.

73 In Zanzibar, spirits are known as *masheitani* (sing. *sheitani*) or *majini* (sing. *jini*) (Larson, 2008:1). The terms *masheitani* and *majini* are used interchangeably when referring to spirits. Specialists in matters of illness and health may emphasise that only Arab/Muslim spirits are called *majini* (and all others are called *masheitani*). It is also argued that only *majini* are beings created by God, whereas *masheitani* is a term used when one talks about the evil actions of humans and spirits alike (ibid.:43). *Masheitani* may also be seen and explained as children of Satan (Ibliss) (Saleh Shaaban Saleh, healer, 4.12.2011).

Case study: Kibuki ritual

A few years back, Suleiman's daughter Abia, that time fifteen years of age, suffered from an inscrutable disorder. Her behaviour became 'strange' and Suleiman and his family suspected a spirit as the cause of her suffering. They believed that Abia was only treatable by a healer who had the ability to investigate (*kupima*) spirits. Suleiman recalled:

"One day, I saw my daughter returning from school. Before reaching the house, she suddenly fell down (ameanguka). When I went there, [...] it was very difficult to take her inside the house. She had extra power (nguvu zaidi), she kicked us with extraordinary energy and we could not even touch her. [...] When we finally got her home, we asked her questions, but she did not hear (hasikii kabisa). Then I started to read the Qur'an (kisomo), we thought to satisfy her through this. The aim was to get rid of the spirit (sheitani). But the spirit did not say anything. [...] Then I found a healer (mganga) who is known to deal with spiritual matters (mambo ya masheitani). He came with lime (dimu), salt (chumvi), and other things and applied them on my daughter's body and some drops in her mouth.⁷⁴ Then he shook hands with her and started talking to the spirit:

Healer: Why are you here? How did you get into the body of that woman?

Spirit: She passed somewhere, where I have been kept to look at people like her and do something bad. And if you do not take care of her, she might get lost.

Healer: Why are you approaching such an innocent girl?

Spirit: I am engaged with her.⁷⁵ It is a revanche.

Healer: It is an innocent girl, her parents have nothing to do with spirits, why don't you leave them alone? What were you promised to get after attacking the girl?

Spirit: I have been given a big cow, I drank all the blood and now I have the power to bother this girl.

Healer: We are giving you time to get out of the girl and if you do not get out, we will force you!"

After the last words of the healer, Suleiman remembered that his daughter started slipping back immediately, jumping up and down until her whole body relaxed:

74 This kind of medicine is called *talmalandi*, and consists of limestone mixed with water, applied on the patient's forehead, in front of the ears, on the neck and throat (Larson, 2008:69).

75 Some spirits are understood to marry and have sexual relations with the people they inhabit (Larson, 2008:69ff).

“The healer called my daughter by her name and she could answer, she did not know where she was. Weeks passed by. When my daughter went back to school, I got phone calls from the teacher, saying that she does not perform well anymore. My daughter would talk to us with a man’s voice, fell down, scream, she could not learn or concentrate, she fell asleep at school and you could not touch her. The spirit was still climbing into her head. [...] We took her to the hospital where we got psychotropic drugs to relax her. Sometimes they injected her with valium. But healers always said: ‘This is a spiritual, not a hospital problem.’ Several weeks of spending days with healers who were considered to be specialists followed.”

Different healers tried to identify Abia’s spirit but none of them managed to understand the real reason for the spirits’ dissatisfaction. Thus, the spirit continued to ‘come to her head’ (*kupandwa kichwani*).

A final healer consultation raised Suleiman’s hopes. He decided to arrange a spiritual ritual for his daughter, as he assumed that the spirit who bothered her was a *kibuki* spirit. To arrange and perform a ritual, people first have to know the tribe affiliation of the respective spirit, as this information leads to the correct choice of ingredients and remedies (including the specific mixture of herbs, scents, special objects, food, and beverages). They will also then know what kind of music or rhythm the spirit likes, which dance or body movements it uses, and which language it speaks. Thus, a special context has to be created, where differences – associated with tribe (*kabila*), concepts of tradition (*mila*), habits (*tabia*), and culturally marked notions of being civilised (*ustaarabu*) – are (re-)presented (Larson, 2008: 60f; Giles, 1999).

A *kibuki* ritual is conducted by a ritual leader (here *fundi*), and only women can be members of the ritual groups. The treated person receives a medication special to *masheitani ya kibuki*, which consists of delicate, good smelling herbs associated with purity and attractiveness (Larson, 2008:69; Mackenrodt, 2011). The suffering person as well as the others joining the ceremony are exposed to incense (a mixture of *udi* and *sandarusi*) prepared on an incense burner (*chetezo*). Important parts of the ritual are the application of medicine, prayers, and dances. The spirits’ satisfaction through a special meal – consisting of honey, imported brandy (*barissa*), grapejuice

(*sharbat*), tobacco, and leaf of the betel plant (*tambu*) – is of utmost importance.

In Abia’s case, a healer proved that her bad spirit (*sheitani mbaya*) was indeed a *kibuki* spirit who could be removed through a ritual. Suleiman’s wife and daughter attended weekly *kibuki* sessions in order to worship Abia’s spirit, and they would continue to do so for the foreseeable future, as Suleiman said. As a result of the *kibuki* sessions, Suleiman described his daughter’s state as being balanced (*anafanya kila kitu vizuri*). Nevertheless, the presence of the spirit remained threatening, and the inherent ambiguity of spirits – they may be beneficial and malevolent, feared and desired, deceived and pleased at the same time – became evident in his final statement regarding his daughter’s well-being:

“I am relieved. We believe that if my daughter does not participate in the ritual (*ngoma*), the spirit may come up again. The *ngoma* is a protection. And she has to pray regularly to prevent the disease, I pressure her to go to the mosque. If you do not pray, you might welcome bad spirits. The spirit tries to protect (*namlinda*) [my daughter]. He says ‘I am defending the chair (*kiti*), so that no one can come.’ But he is the real enemy.” (Suleiman, 5.1.2012)

Case study: Rubamba ritual

Masheitani ya rubamba are known to be ‘pagans’ (*washenzi*) from Pemba, categorised as spirits of Swahili origin (*masheitani ya kiswahili*) (Larson, 2008:70). *Rubamba* spirits speak Pembe dialect (*kipembe*) and are perceived as less civilised and rough (ibid.:75) than other spirits. Spirits from Pemba reflect how people on Unguja portray people on Pemba: *masheitani ya rubamba* are seen as powerful spirits whose knowledge about healing and sorcery is important and attractive, yet threatening.

A *rubamba* ritual usually lasts three days and is prepared as follows. The place (in most cases a healer’s house) must be sprinkled with a special decoction of strong smelling herbs and leaves (*majani inye harufu mbaya*). The organiser of the ritual, called *mwele*, is exposed to the smoke of a mixture of incense (*ubani*), aloe wood (*udi*), and orderiferus gum (*uvumba*). The healers who conduct the *rubamba* ritual expect the spirit to disclose its full name (*kutoa jina*). In order to get into contact

with the spirit, the suffering person requires mediators (here *waganga*), so-called ‘assistant doctors’ (*mchale*, *mama nyungu*), and a drumming group (*ngoma*). The professional drummers create a stimulating sound – also interpreted as a treatment (*tiba za sauti*) – which is supposed to arouse the spirit.

Both women and men can be present at *rubamba* rituals, assisting with singing *rubamba* songs and clapping bamboo pieces (*viwale*) in order to raise up the spirit. Children also attend the ritual, as they can be blessed (*kufanya heri*) by spirits perceived as protective.

The case of a woman called Bi Fatma – who had been suffering from deafness for seven years – exemplifies a long search for therapy which ended with the hope of relief through a *rubamba* ritual. After trying a wide variety of remedies (including different sorts of allopathic medicines received from the hospital), Bi Fatma’s deafness was still not resolved. She continued to feel unwell and lost faith in the hospital. Bi Fatma and her family then realised that there must exist a deeper reason for her persistent illness. A first consultation with a healer confirmed their suspicion: Bi Fatma was found to suffer from a spiritual problem. As a consequence, she asked a healer to arrange a three-day *rubamba* ritual on behalf of the spirits.



Bi Fatma is fumigated with incense in order to call

The final and most important day of a *rubamba* ritual started with the preparation of a special medical treatment (*kuingia dawani*) and took place outside (*kutoka nje*). The final ritual part required the strong social participation of the ritual group (*jamaa*),

which danced with Bi Fatma around a large pot of mixed herbal remedies – shrubby herbs and strong smelling basil – specially combined to serve the *masheitani ya rubamba*.

The highlight of the last day was the revealing of the spirits’ place of origin, full name, and personal identity, as a precondition for establishing a relationship with the suffering person. After the healer had identified the spirits’ demands – in Bi Fatma’s case it was a goat, a bird, food – the interaction (dancing) of Bi Fatma and the spirit followed.



Final ritual dance

After the ritual, Bi Fatma reported being able to hear again, and she and her family seemed relieved. The ritual ended as a celebration (*sherehe*) in order to please the spirit. A special dish of food (*ng’ao*) was served and shared between Bi Fatma, the healers, and all participants. As the *rubamba* food is associated with life in rural areas, it contained in the case of Bi Fatma sugar cane, bananas (*ndizi ya mkono*), a mixture of the flesh from coconut and sugar, raw eggs, bread (*manda*), pieces of cassava, honey, and blood. Zanzibaris associate drinking blood with that which is impure and uncivilised; yet spirits are, at their request, served blood from a scarified animal, in Bi Fatma’s case a goat (Larson, 2008: 68).

Conclusion

This chapter reflected crucial points with regard to patients’ health care seeking behaviour. While almost all participants had used biomedical treatment, the majority had also used traditional medicine at least once in their lives, for themselves and/or for their children. Results show that the usage

of and/or compliance *with* therapeutic health care is influenced by several factors, such as the availability of health services, costs, side effects, and patients' classification of diseases and perception of quality of care. One of the major reasons why patients interrupted biomedical therapy was their choice to switch to traditional treatment. The valuing of traditional medicine was also highlighted by the fact that patients considered collaboration between healers and doctors as both desirable and important.

On average, people had paid half as much for their last consultation with traditional health care services compared to their last hospital visit. Especially striking was the result that people in low income areas spent as much on biomedical health care services as those coming from high income areas.

As shown in the final part of the chapter – through the cases of Abia and Bi Fatma – the cause of suffering, sickness, or an imbalance of personal well-being can be conceptualised as originating with spirits. In such cases, patients are considered amenable only to the intervention of specialists in traditional healing. Both case studies exemplify the fact that *ngoma* rituals are occasions through which illness and suffering can be healed, and harmony and contentedness can be restored in the lives of those concerned. They also reveal, however, that therapy seeking is part of a process that involves social, cultural, and psychological factors, as well as financial burdens. Patients often go through long and desperate episodes of searching for relief, which implies both involvement in spiritual rituals as well as the admission to biomedical health care facilities – neither of which are a guarantee for success.

6. Conclusions

“Where there is a wheel, we get a way (panyani hipo nija).” (H. Bonde, TU, 10.11.2011)

In order to improve the effectiveness of public health programmes, a better understanding of the reasons why patients consult with traditional healers and/or biomedical doctors seems warranted. This study provides insight into patients' health seeking behaviour and their preferences with regard to the use of medical care in Zanzibar. This study also highlights differences in approaching disease and suffering and reveals gaps in – as well as potentials for – collaboration between traditional and biomedical practitioners.

Currently, the MoH of Zanzibar sets (ethical) norms and standards for healers in order to regulate their practices. Cooperation between biomedical and traditional practitioners on equal terms, however, is still in its infancy. So far, the only attempts at collaboration have focussed on registering a few selected healers through the governmental TU or getting them involved in training programmes such as those run by World Doctors.

The results of this study show that although advocacy for traditional medicine and attempts to involve traditional healers in primary health care have been undertaken individually by some doctors and the MoH, recent policy tends to be one of coexistence rather than integration. Furthermore, attitudes of superiority and authority are obvious in the way in which healers are told to follow guidelines given by doctors.

The data confirms that there is no lack of enthusiasm on the side of traditional healers to collaborate with doctors. However, the impact of biomedical ideology of disease causation has led biomedical doctors to be less enthusiastic about cooperation with healers. There seemed to be uncertainty about whether some of the diagnostic and/or curative techniques used by healers (e.g., consulting spirits, mixing remedies, or using ‘inactive substances’ such as *dawa ya suna*) should even be permissible at all.

The claim for ‘empirical truth,’ and the need for the proper documentation and scientific validation of healers' remedies, were issues frequently

expressed by doctors and government representatives. As demonstrated in this report, the perception of efficacy was a critical determinant of treatment choices, as many of the patients interviewed sought help from (religious/spiritual) healers after biomedical treatments had been perceived to have failed. The study also reveals that separating bodily symptoms from social, cultural, and symbolic effects is particularly problematic since the concepts of health and illness are more broadly defined and intertwined with social and cultural conditions (Van der Geest, 1995:361).

The main differences between the two health care systems, as identified by the participants of this research, can be summarised as follows:

- Approach to a disease: e.g., disease focused approach versus holistic approach;
- Diagnosis of a disease: e.g., biomedical technology versus healers' attempts to find the social and/or moral nature of the disease;
- Diagnostic tools: e.g., stethoscope versus horn/divination board;
- Assessment of efficacy: e.g., doctors emphasising the need for scientific validation versus healers claims to assess efficacy contextually;
- Treatment methods: e.g., biomedicine's recourse to surgery versus healers' opinion that operations can be avoided;
- Treatment outlook: e.g., biomedical doctors classifying some diseases as incurable (diabetes, HIV/AIDS) versus some healers' claims to be able to cure them;
- Dosage of medicines: e.g., standardisation versus non-standardisation;
- Readiness to cross-refer patients: e.g., healers more willing to refer to biomedicine than *vice versa*;
- Psychosomatic aspects of certain ailments (e.g., infertility, stroke, mental health problems) and the involvement of family members: e.g., less acknowledged by biomedical practitioners than by traditional healers.

Popularity of traditional medicine and healers

During the research the important role that traditional healers (could) play in health care provision was affirmed by all stakeholders. Doctors, healers, and patients gave various explanations for the popularity of traditional medicine. One of the main reasons patients consulted with healers was in order

to mitigate the shortcomings of allopathic medicine. Other frequently cited reasons were traditional medicine's consistency with local cultural/religious values and/or the proximity of traditional healers compared to biomedical facilities.

Despite low incomes, patients seem to be prepared to pay for a range of treatments in the event that they become ill. However, the data suggests that cost alone is not the major criterion for selecting health services; the social context of its delivery (care, attentiveness, support, responsibility, affection) seemed to be equally important. Of major importance are patients' perceptions of quality of care, i.e. a better social and empathic relationship between a healer and patient. Healers are judged as being more patient-centred in several aspects: they focus more on psycho-social topics and issues of daily life than on purely medical questions. In particular, they ask for patients' opinions and frequently discuss their concept of illness in terms that match patients' own ideas and experiences.

As reported in interviews, patients know exactly where to seek help; their choices are not haphazard. Some patients prefer to treat diseases that are considered incurable by biomedical specialists (e.g., diabetes, HIV/AIDS) and/or those which require surgical interventions (e.g., cancer, infertility), with traditional medicine. Patients frequently questioned the need for surgical interventions or were reluctant to make use of the hospital unless their condition became critical. In particular, the treatment of diseases regarded as an affliction or those associated with witchcraft and/or attacks by spirits were reserved for specialists working in the traditional health care sector.

The biomedical sector seemed to be chosen for its professionalism in case of emergencies, for the conducting of laboratory tests, and/or for the treatment of serious diseases (e.g., cancer, TB, HIV/AIDS). Reports of dangerous and harmful practices by traditional healers (e.g., application of medicine with insufficient knowledge and tools, sexual abuse) were reasons for patients to abstain from traditional medicine; the same applies for the experience of harassment *at* – and thus abstaining *from* – hospitals.

Health seeking delay

Several factors – such as the lack of awareness of certain diseases (e.g., TB, diabetes), financial constraints, accessibility of health services, and stigmatisation – prevent people from seeking help in the biomedical sector. Health seeking delay was also often explained as being caused by patients' self-medicating, which was a very common practice.

Conditions for collaboration

Traditional healers and biomedical doctors each outlined the specific conditions that they regarded as necessary for mutual collaboration on equal terms:

- Wish for training, seminars, more knowledge
- Wish for mediators/neutral outsiders (such as NGOs)
- Wish for mutual openness, finding compromises
- Wish to distinguish 'serious' from 'unserious' healers
- Wish for key persons to teach biomedicine/herbal medicine

"Dawa ya asili ni nija, siyo dawa mwenyewe. (Traditional medicine is a way, not solely medicine)." (H. Sharrif, MoH, 4.12.2011)

As the statement of H. Sharrif, Chief pharmacist of the MoH and vice chair of the Traditional Council suggests, traditional medicine can be seen as 'a way,' a process, and not solely medicine. If traditional medicine is to be systematically integrated into the health care system in a positive and fair way, several points should be discussed and evaluated in the future among all stakeholders:

- How to tap existing resources (e.g., gathering ethnobotanical surveys that document important medicinal plant species for the treatment of Zanzibar's most urgent diseases)?⁷⁶

⁷⁶ In terms of biodiversity, Tanzania and Zanzibar are rich. Around forty-five percent of Tanzania's medicinal plants have already been ethnobotanically studied (Chhabra and Uiso, 1990; Chhabra and Mahunnah, 1994; Mahunnah and Mshigeni, 1996; Moshi et al., 2004; Marsland, 2007:762; Stangeland et al., 2008:293).

- How to learn from similar collaboration projects in Africa, such as the 'medical dialogue method' by Wolf and von Roenne (2007), which promotes communication between biomedical and traditional health sectors in order to reach agreement on concrete collaboration and future resolutions? See also proposed mechanisms and curricula for strengthening the integration of traditional medicine into national health systems by Busia and Kasilo (2010), as well as suggestions on collaboration put forward by UNAIDS (2006).
- How to create cross-directional site visits, individual or group exchanges, and/or educational events involving both healers and doctors?
- How to create a cross-referral system that includes agreement on referral criteria, selecting referring practitioners, designing referral forms, and creating a follow-up system?
- How to encourage recognition of the practices of TBAs by the MoH? How could they be trained in selected medical practices?
- How to define key persons for further training sessions (e.g., doctors ready to teach healers; healers ready to offer courses for those interested in herbal medicine; the MoH including a public health specialist for future work)?

Funding was a crucial aspect for all stakeholders. It is remarkable that all stakeholders requested more funding for research on traditional medicine. Therefore, discussions on future collaboration should include the following topics that participants addressed during research:

- Are representatives of the government/MMH willing to provide on-site practice facilities to healers, combined with training programmes?
- Is the MoH ready to support healers in the proper documentation and scientific validation of their *materia medica* (e.g., by offering laboratory screenings) – as this is one of their main requests from healers – and if yes, on what terms?
- Are healers ready to disclose their treatment methods and substances to the biomedical sector? If so, how can their knowledge be protected and how can they themselves benefit from exposing their expertise?

Bibliography

- ADAMS, V. (2002a): Establishing Proof: Translating 'Science' and the State in Tibetan Medicine. In: Nichter, M. and M. Lock (eds.): *New Horizons in Medical Anthropology: Essays in Honour of Charles Leslie*. London and New York: Verso: 200-221.
- ADAMS, V. (2002b): Randomized Controlled Crime: Postcolonial Sciences in Alternative Medicine Research. In: *Social Studies of Science* 32(5-6): 659-690.
- ADAMS, V., M. SCHREMPF & S. R. CRAIG (2010): Introduction: Medicine in Translation between Science and Religion. In: Adams et al. (eds.): *Medicine between Science and Religion - Explorations on Tibetan Grounds*. London, New York: Berghahn Publications: 1-32.
- AFM Africa Fighting Malaria (2008): Keeping Malaria out of Zanzibar. Internet source: http://www.fightingmalaria.org/pdfs/AFM_Zanzibar_March08.pdf [accessed: 8.6.2012].
- AKERELE, O. (1991): Registration and Utilisation of Herbal Remedies in Some Countries of East, Central and Southern Africa. In: Tanzania Ministry of Health (ed.): *Proceedings of International Conference on Traditional Medicinal Plants, Dar es Salaam*: University Press: 3-8.
- ALONZO, A. & N.R. REYNOLDS (1995): Stigma, HIV and AIDS: an Exploration and Elaboration of a Stigma Trajectory. In: *Social Science and Medicine* 41(3): 303-315.
- ASHFORTH, A. (2000): *Madumo: A Man Bewitched*. Chicago: University of Chicago Press.
- ASHFORTH, A. (2010): Spiritual Insecurity and AIDS in South Africa. In: Dilger, H. and U. Luig (eds.): *Morality, Hope and Grief. Anthropologies of AIDS in Africa*. New York, Oxford. Berghahn Books: 43-61.
- AWAH, P.K., N. UNWIN & P. PHILLIMORE (2008): Cure or Control: Complying with Biomedical Regime of Diabetes in Cameroon. In: *BMC Health Services Research* 8: 43.
- BABB, D.A., L. PEMBA, P. SEATLANYANE, S. CHARALAMBOUS, G.J. CHURCHYARD & A.D. GRANT (2007): Use of Traditional Medicine by HIV-infected Individuals in South Africa in the Era of Antiretroviral Therapy. In: *Psychology, Health and Medicine* 12(3): 314-320.
- BAER, H.A., M. SINGER & I. SUSSER (2003) [1997]: *Medical Anthropology and the World System: A Critical Perspective*. Westport, CT: Bergin & Garvey.
- BARKER, R.D., F.J.D. MILLARD & L. MALATSI ET AL. (2006): Traditional Healers, Treatment Delay, Performance Status and Death from TB in Rural South Africa. In: *The International Journal of Tuberculosis and Lung Disease* 10(6): 670-675.
- BECKER, F. (2007): The Virus and the Scriptures: Muslims and AIDS in Tanzania. In: *Journal of Religion in Africa* 37(1): 16-40.
- BECKMANN, N. (2009): AIDS and the Power of God: Narratives of Decline and Coping Strategies in Zanzibar. In: Becker, F. and P.W. Geissler (eds.): *AIDS and Religious Practice in Africa*. Leiden: Brill Publishers: 119-54.
- BEHREND, H. & U. LUIG (eds.) (1999): *Spirit Possession and Modernity*. London: James Currey.
- BODEKER, G. (2001): Planning for Cost-effective Traditional Health Services. In: *Traditional Medicine: Better Science, Policy and Services for Health Development*. WHO Kobe Centre for Health Development, Kobe, Japan: 31-70.
- BRIGHT, A.O. & O. TAYLOR (1999): A Socio-economic & Demographic Assessment of the Extent of Self-medication in Nigeria. In: *West African Journal of Pharmacy* 13(2): 74-77.
- BRUCHHAUSEN, W. (2002): Die Marktnischen der „traditionellen Heiler“. Anfragen an den Gesundheitsbegriff aus dem Fremden und dem Eigenen. In: Grönemeyer, D., T. Kobusch, and H. Schott (eds.): *Gesundheit im Spiegel der Disziplinen, Epochen und Kulturen*. In: *Ars Medicinae* (1), Tübingen: Niemeyer: 149-163.

- BRUCHHAUSEN, W. (2004): *Medizin zwischen den Welten. Geschichte und Gegenwart des medizinischen Pluralismus im südöstlichen Tansania*. Bonn: University Press.
- BRUCHHAUSEN, W. (2010): Heiltraditionen oder „traditionelle Medizin“? Von Förderung und Verweigerung des biomedizinischen Paradigmas in Tansania. In: Dilger, H. and B. Hadolt (eds.): *Medizin im Kontext. Krankheit und Gesundheit in einer vernetzten Welt*. Frankfurt am Main, Berlin, Bern, Bruxelles, New York, Oxford, Wien: Peter Lang Verlag: 245-266.
- BUSIA, K. & O.M.J. Kasilo (2010): Collaboration between traditional health practitioners and conventional health practitioners: some country experience. In: *The African Health Monitor. Special Issue: African Traditional Medicine Day, 31 August. WHO-Afro*.
- CHHABRA, S.C., R.L.A. MAHUNNAH & E.N. MSHIU (1987-1993): Plants Used in Traditional Medicine in Eastern Tanzania. In: *Journal of Ethnopharmacology* (21, 25, 28, 29, 33): 6 Pamphlets.
- CHHABRA, S.C. & F.C. UISO (1990): A Survey of the Medicinal Plants of Eastern Tanzania for Alkaloids, Flavonoids, Saponins and Tannins. In: *Fitoterapia* 61: 307-316.
- CHHABRA, S.C. & R.L.A. MAHUNNAH (1994): Plants Used in Traditional Medicine by Hayas of the Kagera Region, Tanzania. In: *Economic Botanic* 48(2): 121-129.
- CHANDRA, P.S., H. HERRMAN, J. FISHER, M. KASTRUP, U. NIAZ, M. RONDON & A. OKASHA (2009): *Contemporary Topics in Women's Mental Health. Global Perspectives in a Changing Society*. Chichester: John Wiley & Sons Ltd.
- COX, P.A. (1995): The Ethnobotanical Approach to Drug Discovery: Strengths and Limitations. In: Chadwick, D. and J. Marsh (eds.): *Ethnobotany and the Search for New Drugs. Ciba Foundation Symposium* 185.
- DILGER, H. (2005): *Leben mit AIDS. Krankheit, Tod und soziale Beziehungen in Afrika. Eine Ethnographie*. Frankfurt: Campus Verlag.
- DILGER, H. (2007): Healing the Wounds of Modernity: Community, Salvation and Care in a Neo-Pentecostal Church in Dar es Salaam, Tanzania. *Journal of Religion in Africa* 37 (1): 59-83.
- DILGER, H. (2008): "We Are All Going to Die": Kinship, Belonging and the Morality of HIV/AIDS-related Illnesses and Deaths in Rural Tanzania. In: *Anthropological Quarterly* 81(1): 207-232.
- DILGER, H. (2012): Targeting the Empowered Individual: Transnational Policy-making, the Global Economy of Aid and the Limitation of 'Biopower' in the Neoliberal Era. In: Dilger, H., A. Kane, and S. Langwick (eds.): *Medicine, Mobility, and Power in Global Africa. Transnational Health and Healing*. Bloomington: Indiana University Press: 60-91.
- DILGER, H. & U. LUIG (eds.) (2010): *Morality, Hope and Grief. Anthropologies of AIDS in Africa*. New York, Oxford: Berghahn Books.
- DREWS, J. (2000): Drug Discovery: a Historical Perspective. In: *Science* 287(5460): 1960-1964.
- ERNST, E. (2003): Herbal Medicines Put into Context. In: *British Medical Journal* 327: 881-882.
- ETKIN, N.L. (1988): Cultural Constructions of Efficacy. In: Whyte, S.R. and S. Van der Geest (eds.): *The Context of Medicines in Developing Countries. Studies in Pharmaceutical Anthropology* 3-11. Amsterdam: Het Spinhuis: 299-326.
- ETKIN, N.L. (1992): "Side Effects": Cultural Constructions and Reinterpretations of Western Pharmaceuticals. In: *Medical Anthropology Quarterly* 6(2): 99-113.
- FARMER, P. (1988): Bad Blood, Spoiled Milk: Body Fluids as Moral Barriers in Rural Haiti. In: *American Ethnologist* 15(1): 62-83.
- FEIERMAN, S. (1981): Therapy as a System-in-Action in Northeastern Tanzania. In: *Social Science and Medicine* 15B: 353-360.
- FEIERMAN, S. (1985): Struggles for Control: the Social Roots of Health and Healing in Modern Africa. In: *African Studies Review* 28(2/3): 73-147.

- FEIERMAN, S. (2000): Explanation and Uncertainty in the Medical World of Ghaambo. In: *Bulletin of the History of Medicine* 74: 317-344.
- FEIERMAN, S. & J.M. JANZEN (eds.) (1992): *The Social Basis of Health and Healing in Africa*. Berkeley: University of California Press.
- FOUCAULT, M. (1998): *The History of Sexuality. Vol 1: The Will to Knowledge*. London: Penguin.
- GERARD, B., K. DONNA, K. RACHEL & H. JACQUES (2000): A Regional Task Force on Traditional Medicine and AIDS. In: *Lancet* 355: 1284.
- GERRITS, T. (1997): Social and Cultural Aspects of Infertility, Stigma and Media Reports. In: *Social Science and Medicine* 59: 39-48.
- GERRITS, T. (2002): Infertility and Matrilinearity: the Exceptional Case of the Macua. In: Inhorn, M. and F.V. Balen (eds.): *Infertility around the Globe: New Thinking on Childlessness, Gender, and Reproductive Technologies*. Berkeley: University of California Press: 233-246.
- GESSLER, M.C., D.E. MSUYA, M.H.H. NKUNYA, L.B. MWASUMBI, A. SCHÄR, M. HEINRICH & M. TANNER (1995): Traditional Healers in Tanzania: Sociocultural Profile and Three Short Portraits. In: *Journal of Ethnopharmacology* 48:145-160.
- GILES, L. (1987): Possession Cults on the Swahili Coast: A Re-examination of Theories of Marginality. In: *Africa* Vol. 57(2): 234-258.
- GILES, L. (1999): Spirit Possession and the Symbolic Construction of Swahili Society. In: Behrend, H. and U. Luig (eds.): *Spirit Possession. Modernity and Power in Africa*. Madison, The University of Wisconsin Press. 142-164.
- GRANADO, S., L. MANDERSON, B. OBRIST VAN EEUWJIK & M. TANNER (2011): Appropriating "Malaria": Local Responses to Malaria Treatment and Prevention in Abidjan, Côte d'Ivoire. In: *Medical Anthropology* 30(1): 102-121.
- GREEN, E.C. (1994): *AIDS and STDs in Africa: Bridging the Gap between Traditional Healing and Modern Medicine*. Boulder, CO: Westview Press.
- GREEN, M. (2000): Public Reform and the Privatization of Poverty: Some Institutional Determinants of Health Seeking Behaviour in Southern Tanzania. In: *Culture, Medicine and Psychiatry* 24: 403-430.
- HAHN, R. & A. KLEINMAN (1983a): Belief as Pathogen, Belief as Medicine. In: *Medical Anthropology Quarterly* 14(4): 16-19.
- HAHN, R. & A. KLEINMAN (1983b): Biomedical Practice and Anthropological Theory: Frameworks and Directions. In: *Annual Review of Anthropology* 12: 305-333.
- HARDON, A., P. BOONMONGKON, P. STREEFLAND, M.L. TAN, T. HONGVIVATANA & S. VAN DER GEEST (2001): *Applied Health Research: Anthropology of Health and Health Care*. Het Spinhuis: Amsterdam.
- HARDON, A., D. AKURUT, C. COMORO, C. EKEZIE, H.F. IRUNDE & T. GERRITS (2007): Hunger, Waiting Time and Transport Costs: Time to Confront Challenges to ART Adherence in Africa. In: *AIDS Care* 19(5): 658-665.
- HARDON, A., A. DESCLAUX, M. EGROT, E. SIMON, E. MICOLLIER & M. KYAKUWA (2008): Alternative Medicines for AIDS in Resource-poor Settings: Insights from Exploratory Anthropological Studies in Asia and Africa. In: *Journal of Ethnobiology and Ethnomedicine* 4: 1-6.
- HARDON, A. & H. DILGER (2011): Global AIDS Medicines in East African Health Institutions. In: *Medical Anthropology* 30(2): 136-157.
- HAUSMANN-MUELA, S., J. MUELA RIBERA & I. NYAMONGO (2003): Health-seeking Behaviour and the Health System Response. DCP Working Paper No. 14. Internet source: <http://www.dcp2.org/file/29/wp14.pdf> [accessed: 8.3.2012].
- HÖRBST, V. (2006): Infertility and In-vitro Fertilization in Bamako, Mali: Women's Experience, Avenues for Solution and Social Contexts Impacting on Gynaecological Consultations. In: *Curare (special issues: Reproductive disruptions? Perspectives on African contexts)* 29(1): 35-46.

- HSU, E. & S. HARRIS (eds.) (2010): *Plants, Health and Healing. On the Interface of Ethnobotany and Medical Anthropology*. Berghahn Books.
- INHORN, M. (1994): *Quest for Conception. Gender, Infertility and Egyptian Medical Traditions*. Philadelphia: University of Pennsylvania Press.
- JANZEN, J.M. (1978): *The Quest for Therapy: Medical Pluralism in Lower Zaire*. Berkeley: University of California Press.
- JANZEN, J.M. (1992): *Ngoma. Discourses of Healing in Central and Southern Africa*. Berkeley, Los Angeles, Oxford: University of California Press.
- JANZEN, J.M. (1997): *Healing*. In: Middleton, J. (ed.): *Encyclopedia of Africa South of the Sahara*. New York: Charles Scribner's Sons: 274-283.
- KATZ, S.S. (1989): *Uvulectomy: A Common Ethnosurgical Procedure in Africa*. In: *Medical Anthropology Quarterly* Volume 3(1): 62-69.
- KAYOMBO, E.J. (1997): *Traditional Birth Attendants (TBAs) and Maternal Health Care in Tanzania*. In: E. Kalipen, E. and P. Thiuri (eds.): *Issues and Perspectives on Health Care in Contemporary Sub-Saharan Africa by Studies in Africa Health and Medicine*. The Edwin Mellen Press Lewston, Queenston: Lampeter. Volume 8: 288-305.
- KAYOMBO, E.J., F.C. UISO, Z.H. MBWAMBO, R.L.A. MAHUNNAH, M.J. MOSHI & Y.H. MGONDA (2007): *Experience of Initiating Collaboration of Traditional Healers in Managing HIV and AIDS in Tanzania*. In: *Journal of Ethnobiology and Ethnomedicine* 1(3). Internet source: <http://www.ethnobiomed.com> [accessed 14.12.2011].
- KAYOMBO, E.J., F.C. UISO & R.L.A. MAHUNNAH (2012): *Experience on Healthcare Utilization in Seven Administrative Regions of Tanzania*. In: *Journal of Ethnobiology and Ethnomedicine* (8): 1-9. Internet source: <http://www.ethnobiomed.com/content/8/1/5> [accessed 22.3.2012].
- KIRMAYER, L.J. (2004): *The Cultural Diversity of Healing: Meaning, Metaphor and Mechanism*. In: *British Medical Bulletin* 69: 33-48.
- KLEINMAN, A. (1973): *Medicine's Symbolic Reality on a Central Problem in the Philosophy of Medicine Inquiry*. In: *An Interdisciplinary Journal of Philosophy* 16(Issue 1&4): 206-213.
- KLEINMAN, A. (1980): *Patients and Healers in the Context of Culture. An Exploration of the Borderline between Anthropology, Medicine, and Psychiatry*. Berkeley: University of California Press.
- KLEINMAN, A. (1992): *Local Moral Worlds of Suffering. An Interpersonal Focus for Ethnographies of Illness Experiences*. In: *Qualitative Health Research* 2(127): 1-9.
- KLEINMAN, A. (1995): *Writing at the Margins: Discourse between Anthropology and Medicine*. Berkeley: University of California Press.
- KLEINMAN, A. (2006): *What Really Matters. Living a Moral Life Admits Uncertainty and Danger*. Oxford University Press.
- KRUGER, C., O. OF, E. MIGHAY, AND M. ALI (2011): *Where Do Women Give Birth in Rural Tanzania?* In: *Rural and Remote Health* 11(3): 1791.
- KUTALEK, R. (2001): *Steven Lihonama Lutumo. Leben und Arbeit eines traditionellen Heilers der Bena Südwest-Tansanias*. Wiener Ethnomedizinische Reihe, Band 1, Berlin: VWB.
- KUTALEK, R. (2003): *Divination und Diagnose bei den Bena Südwest-Tansanias*. [Divination and Diagnosis among the Bena of Southwest Tanzania]. In: *Anthropos* 98: 59-73.
- LABHARDT, N.D., S.M. ABOA, E. MANGA, J.M. BENSING & W. LANGEWITZ (2010): *Bridging the Gap: How Traditional Healers Interact with their Patients. A Comparative Study in Cameroon*. *Tropical Medicine and International Health* 15(9): 1099-1108.
- LAMBERT, H. & C. McKEVITT (2002): *Anthropology in Health Research: from Qualitative Methods to Multidisciplinarity*. In: *BMJ* Volume 325(27): 210-213.

- LANGLOIS-KLASSEN, D., W. KIPP, G.S. JHANGRI & T. RUBAALE (2007): Use of Traditional Herbal Medicine by AIDS Patients in Kabarole District, Western Uganda. In: *The American Journal of Tropical Medicine and Hygiene* 77(4): 757-763.
- LANGWICK, S. (2006): Geographies of Medicine: Integrating the Boundary between “Traditional” and “Modern” Medicine in Tanganyika. In: Luedke, T.J. and H.G. West (eds.): *Borders and Healers. Brokering Therapeutic Resources in Southeast Africa*. Bloomington: Indiana University Press: 143-166.
- LANGWICK, S. (2007): Devils, Parasites, and Fierce Needles: Healing and the Politics of Translation in Southern Tanzania. In: *Science Technology Human Values* 32: 88-117.
- LANGWICK, S. (2011): *Bodies, Politics, and African Healing. The Matter of Maladies in Tanzania*. Indiana University Press.
- LARSON, K. (2008): *Where Humans and Spirits Meet. The Politics of Rituals and Identified Spirits in Zanzibar*. New York, Oxford: Berghahn.
- LATOUR, B. (1987): *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge: Harvard University Press.
- LESLIE, C. (1980): Medical Pluralism in World Perspective. In: *Social Science and Medicine* 14B: 191-195.
- LEWIS, I.M. (1971): *Ecstatic Religion: An Anthropological Study of Spirit Possession and Shamanism*. Harmondsworth: Penguin Books.
- LIU, J. (2007): An Overview of Clinical Studies on Complementary and Alternative Medicine in HIV Infection and AIDS. In: Bodeker, G. and G. Burford (eds.): *Traditional, Complementary and Alternative Medicine. Policy and Public Health Perspectives*. London: Imperial College Press: 295-308.
- LIVERPOOL, J., A. RANELL, M. JOHNSON, K. EBBA, S. SHELLY & C. LIVERPOOL (2004): Western Medicine and Traditional Healers: Partners in the Fight against HIV/AIDS. In: *Journal of the National Medical Association* 96(4): 822-825.
- LOCK, M. & M. NICHTER (2002): Introduction: From Documenting Medical Pluralism to Critical Interpretations of Globalized Health Knowledge, Policies and Practices. In: Lock, M. and M. Nichter (eds.): *New Horizons in Medical Anthropology. Essays in Honour of Charles Leslie*. London, New York: Routledge: 1-34.
- LOCK, M. & V.K. NGUYEN (2011): *An Anthropology of Biomedicine*. London: Wiley. John Wiley & Sons.
- LUEDKE, T.J. & H.G. WEST (eds.) (2006): *Borders and Healers: Brokering Therapeutic Resources in Southeast Africa*. Bloomington: Indiana University Press.
- LUIG, U. (1999): Constructing Local Worlds. Spirit Possession in the Gwembe Valley. In: Behrend, H. and U. Luig (eds.): *Spirit Possession and Modernity*. London: James Currey: 124-142.
- MACKENRODT, L. (2011): *The Jinn Fly on Friday. On Swahili Spirit Possession and Islamic Healing in Contemporary Tanzania*. Hamburg: Dr. Kovač Verlag.
- MAHUNNAH, R.L.A. & K.E. MSHIGENI (1996): Tanzania's Policy on Biodiversity Prospecting and Drug Discovery Programs. In: *Journal of Ethnopharmacology* 51(1-3): 221-228.
- MAKUNDI, E.A., H.M. MALEBO, P. MHAME, A.Y. KITUA & M. WARSAME (2006): Role of Traditional Healers in the Management of Severe Malaria among Children Below Five Years of Age: The Case of Kilosa and Handeni Districts, Tanzania. In: *Malaria Journal* 18(5): 5-58.
- MANNI, J.J. (1984): Uvulectomy, a Traditional Surgical Procedure in Tanzania. In: *Annals of Tropical Medicine and Parasitology*, Volume: 78(1): 49-53.
- MARSLAND, R. (2007): The Modern Traditional Healer: Locating 'Hybridity' in Modern Traditional Medicine, Southern Tanzania. In: *Journal of Southern African Studies* 33(4): 751-765.
- MATTES, D. (2011): “We Are Just Supposed to Be Quiet”: The Production of Adherence to Antiretroviral Treatment in Urban Tanzania. In: *Medical Anthropology* 30(2): 158-182.
- MATTHIES, F. (1998): *Traditional Herbal Antimalarials. Their Role and Their Effects in the Treatment of Malaria Patients in Rural Tanzania*. Basel: Schlattmann.

- MBOGORA, A. (2012): Tansania: Projektion und Wirklichkeit. Mit Magie zum Wahlsieg. In: Der Überblick (02/2002). Zeitschrift für ökumenische Begegnung und internationale Zusammenarbeit.
- MBWAMBO, Z.H., R.L.A. MAHUNNAH & E.J. KAYOMBO (2007): Traditional Health Practitioner and the Scientist: Bridging the Gap in Contemporary Health Research in Tanzania. In *Tanzania Health Research Bulletin* 9(2): 115-120.
- MEIER ZU BIESEN, C. (2010): The Rise to Prominence of *Artemisia annua* L. – The Transformation of a Chinese Plant to a Global Pharmaceutical. In: *African Sociological Review. Revue Africaine de Sociologie* 14(2): 24-46.
- MEIER ZU BIESEN, C. (2012): Transformations of Medical Knowledge. The Introduction of the Medicinal Plant *Artemisia annua* L. in Tanzania: Consequences, Challenges and Local Innovation Processes. Unpublished PhD Thesis (in German). Institute of Social and Cultural Anthropology, Freie Universität Berlin.
- MHAME, P. (2000): The Role of Traditional Knowledge (TK) in the National Economy: The Importance and Scope of TK, Particularly Traditional Medicine in Tanzania. Paper prepared for UNCTAD Expert Meeting on Systems and National Experiences for Protecting Traditional Knowledge, Innovation and Practices, Geneva. Internet source: http://www.unctad.org/trade_env/docs/Tanzania.pdf [accessed 2.11.2011].
- MOSHI, M.J., J.C. COSAM, Z.H. MBWAMBO, M. KAPINGU & M.H.H. NKUNYA (2004): Testing Beyond Ethnobotanical Claims: Brine Shrimp Lethality of Some Tanzanian Plants. In: *Pharmaceutical Biology* 42: 547-551.
- MSHIU, E.N. AND S.C. CHHABRA (1982): Traditional Healers and Health Care Delivery in Tanzania. In: *Tropical Doctor* 12: 142-143.
- MUELA, S.H., J.M. RIBERA, A.K. MUSHI & M. TANNER (2002): Medical Syncretism with Reference to Malaria in a Tanzanian Community. In: *Social Science and Medicine* 55(3): 403-413.
- NICHTER, M. (1992): Ethnomedicine: Diverse Trends, Common Linkages. In: M. Nichter (ed.): *Anthropological Approaches to the Study of Ethnomedicine*. Amsterdam: Gordon and Breach Science Publishers.
- NICHTER, M. (2002): Paying for What Ails You: Sociocultural Issues Influencing the Ways and Means of Therapy Payment in India. In: Nichter, M., M. Lock and C. Leslie (eds.): *New Horizons in Medical Anthropology: Essays in Honour of Charles Leslie*. London: Routledge: 239-264.
- NSIMBA, S.E.D. & E.J. KAYOMBO (2008): Sociocultural Barriers and Malaria Health Care in Tanzania. In: *Evaluation & the Health Professions* 31(3): 318-322.
- OBRIST VAN EEUWJIK, B., N. ITEBA, C. LENGELER, A. MAKEMBA, C. MSHANA, H. MSHINDA, R. NATHAN, S. ALBA, A. DILLIP, M.W. HETZEL, I. MAYUMANA & A. SCHULZE (2007): Access to Health Care in Contexts of Livelihood Insecurity: A Framework for Analysis and Action. In: *PLoS Medicine* 4(10): 308.
- OKOME-NKOU MOU, M., F. OKOME-MIAME, E. KENDJO, ET AL. (2005): Delay between First HIV-related Symptoms and Diagnosis of HIV Infection in Patients Attending the Internal Medicine Department of the Fondation Jeanne Ebori (FJE), Libreville, Gabon. *HIV Clinical Trials* 6(1): 38-42.
- ORODHO, J.A., C. KIRIMUHUZYA, J.N. OTIENO, J.J. MAGADULA & P. OKEMO (2011): Local Management of Tuberculosis by Traditional Medicine Practitioners in Lake Victoria Region. In: *The Open Complementary Medicine Journal* 3: 1-9.
- PARKIN, D. (2006): The Commercialisation of Biomedicine and the Politics of Flight in Zanzibar, Tanzania. In: *Journal of Ethnic and Migration Studies* Vol. 32(4): 697-714.
- PERSSON, A. (2004): Incorporating Pharmakon: HIV, Medicine, and Body Shape Change. In: *Body and Society* 10(4): 45-67.
- PETRYNA, A. & A. KLEINMAN (2006): The Pharmaceutical Nexus. In: Petryna, A., A. Lakoff and A. Kleinman (eds.): *Global Pharmaceuticals: Ethics, Markets, Practices*. Durham: Duke University Press: 1-32.
- POLLOCK, A. (2011): Transforming the Critique of Big Pharma. In: *BioSocieties* 6(1): 106-118.

- PROBST, P. (1999): Mchape '95, or, The Sudden Fame of Villy Goodson Chisupe: Healing, Social Memory and the Enigma of the Public Sphere in Post-Banda Malawi. In: *Africa* 69(1): 108-138.
- RASOANAIVO, P., E. DEHARO, S. RATSIMAMANGA-URVERG & F. FRAPPIER (2004): Guidelines for the Nonclinical Evaluation of the Efficacy of Traditional Antimalarials. In: Willcox, M., G. Bodeker, P. Rasoaniavo, and B. Ranton (eds.): *Traditional Herbal Medicines for Modern Times. Traditional Medicinal Plants and Malaria*. Boca Raton: CRC Press: 255-271.
- REIHLING, H. (2008): Bioprospecting the African Renaissance: The New Value of Muthi in South Africa. In: *Journal of Ethnobiology and Ethnomedicine* 4(9): 1-10.
- ROMERO-DAZA, N. (2002): Traditional Medicine in Africa. In: *The Annals of American Academy of Political and Social Science* 583: 173-176.
- ROSS, E. (2008): Traditional Healing in South Africa. In: *Social Work in Health Care* 46(2): 15-33.
- RUTERT, B., H. DILGER, & G.M. MATSABISA (2011): Bioprospecting in South Africa: Opportunities and Challenges in the Global Knowledge Economy? – a Field in the Becoming. In: CAS Working Papers No. 1-11, Center for Area Studies der Freien Universität Berlin. Internet source: <http://www.fu-berlin.de/sites/cas/forschung/publikationen/working-papers/index.html> [accessed 16.6.2012].
- SCHOEPF, B.G. (2001): International AIDS Research in Anthropology: Taking a Critical Perspective on the Crisis. In: *Annual Review of Anthropology* 39: 335-361.
- SEMALI, I.A.J. (1986): Associations and Healers: Attitudes towards Collaboration in Tanzania. In: Last, M. and G.L. Chavunduka (eds.): *The Professionalization of African Medicine*. Manchester: Manchester University Press: 87-98.
- SEMALI, I.A.J. & M. AINSWORTH (1995): A Profile of Traditional Healers in an Area Hard-hit by the AIDS Epidemic: Kagera Region. Tanzania: The World Bank.
- SETEL, P.W. (1999): *A Plague of Paradoxes: AIDS, Culture, and Demography in Northern Tanzania*. Chicago: The University of Chicago Press.
- SEWPAUL, V. (1999): Culture, Religion and Infertility: A South African Perspective. *British Journal of Social Work* 29(5): 741-754.
- SPELMAN, K. (2009): „Silver Bullet” Drugs vs. Traditional Herbal Remedies: Perspectives on Malaria. In: *Herbal Gram* 84. Internet source: http://www.anamed.net/English_Home/anamed_artemisia_programme/Spelman_December_2009_Silver_bullet.pdf [accessed 10.1.2011].
- STANGELAND, T., S.S. DHILLION & H. REKSTEN (2008): Recognition and Development of Traditional Medicine in Tanzania. In: *Journal of Ethnopharmacology* 117(2): 290-299.
- STOLLER, P. (1995): *Embodying Colonial Memories: Spirit Possession, Power and the Hauka in West Africa*. New York: Routledge.
- THE UNITED REPUBLIC OF TANZANIA (2002a): Population and Housing Census, Zanzibar. Internet source: <http://www.tanzania.go.tz/nbsf.html>; Census 2002: <http://www.nbs.go.tz/takwimu/references/2002popcensus.pdf> [accessed: 2.10.2011].
- THE UNITED REPUBLIC OF TANZANIA (2002b): Traditional and Alternative Medicine Act No. 23 of 2002. Dar es Salaam: Government Printer.
- THE UNITED REPUBLIC OF TANZANIA (2008): National Aids Control Programme. National Guidelines for the Management of HIV and AIDS. Ministry of Health Tanzania, Dar es Salaam.
- THE REVOLUTIONARY GOVERNMENT OF ZANZIBAR (RGoZ) (2010): *The Zanzibar Strategy for Growth and Reduction of Poverty: 2010-2015 (ZSGRP) MKUZA II*.
- UIISO, F.C., E.J. KAYOMBO, Z.H. MBWAMBO, Y.H. MGONDA, R.L.A. MAHUNNAH & M.J. MOSHI (2006): Traditional Healers Knowledge and Implications to the Management and Control of HIV/AIDS in Arusha, Tanzania. In: *Tanzania Health Research Bulletin* 8: 95-100.
- UNAIDS (2000): *Collaboration with Traditional Healers in HIV/AIDS Prevention and Care in Sub-Saharan Africa. A literature review*. UNAIDS.

- UNAIDS (2006): Collaborating with Traditional Healers for HIV Prevention and Care in Sub-Saharan Africa: Suggestions for Programme Managers and Field Workers. UNAIDS BEST PRACTICE COLLECTION. WHO Library Cataloguing-in-Publication Data.
- UPTON, R.L. (2001): 'Infertility Makes You Invisible': Gender, Health and the Negotiation of Fertility in Northern Botswana. In: *Journal of Southern African Studies* 27: 349-362.
- VAN DER GEEST, S. (1992): Is Paying for Health Care Culturally Acceptable in Sub-Saharan Africa? Money and Tradition. In: *Social Science and Medicine* 34(6): 667-673.
- VAN DER GEEST, S. (1995): The Efficacy of Traditional Medicine (and Biomedicine). In: Van der Velden, K., J.K.S. Ginneken, J.P. Walle, F.B., and J.H. de Wijnen (eds.): *Health Matters: Public Health in North-South Perspective*. Houten/Diegem: Bohnstaflem Van Loghum: 360-365.
- VAN DER GEEST, S. (1997): Is there a Role for Traditional Medicine in Basic Health Services in Africa? A Plea for a Community Perspective. In: *Tropical Medicine and International Health* 2(9): 903-911.
- VAN DER GEEST, S. & A. HARDON (1990): Self-medication in Developing Countries. In: *Journal of Social and Administrative Pharmacy* 7(4): 199-204.
- VAN DER GEEST, S., S.R. WHYTE & A. HARDON (1996): The Anthropology of Pharmaceuticals: A Biographical Approach. In: *Annual Review of Anthropology* 25: 153-178.
- VAN DER GEEST, S. & A. HARDON (2006): Social and Cultural Efficacies of Medicines: Complications for Antiretroviral Therapy. In: *Journal of Ethnobiology and Ethnomedicine* 2(48): 1-5.
- WALDRAM, J.B. (2000): The Efficacy of Traditional Medicine: Current Theoretical and Methodological Issues. In: *Medical Anthropology Quarterly* 14(4): 603-625.
- WEST, H.G. (2006): Working the Borders to Beneficial Effect: The Not-So-Indigenous Knowledge of Not-So-Traditional Healers in Northern Mozambique. In: Luedke, T.J. and H.G. West (eds.): *Borders and Healers: Brokering Therapeutic Resources in Southeast Africa*. Bloomington: Indiana University Press: 21-42.
- WHYTE, S.R. (1991): Knowledge and Power in Nyole Divination. In: Peek, P. (ed.): *African Divination Systems*. Bloomington: Indiana University Press: 153-172.
- WHYTE, S.R. (1997): *Questioning Misfortune. The Pragmatics of Uncertainty in Eastern Uganda*. Cambridge: Cambridge University Press.
- WHYTE, S.R., S. VAN DER GEEST & A. HARDON (2002): *Social Lives of Medicines*. New York: Cambridge University Press.
- WHO (1991): *Traditional Healers and Community Health*. Genf: WHO.
- WHO (2000): *General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine*. Geneva, World Health Organization. Internet source: http://whqlibdoc.who.int/hq/2000/WHO_EDM_TRM_2000.1.pdf [accessed 3.4.2012].
- WHO (2002a): *Traditional Medicine – Growing Needs and Potential. Policy Perspectives on Medicine 2*. Genf: WHO.
- WHO (2002b): *Traditional Medicine Strategy 2002-2005*. Genf: WHO.
- WHO (2010): *HIV/AIDS Programme. Strengthening Health Services to Fight HIV/AIDS. Antiretroviral Therapy for HIV Infection in Adults and Adolescents. Recommendations for a Public Health Approach*. Internet source: http://www.whqlibdoc.who.int/publications/2010/9789241599764_eng.pdf [accessed 15.11.2011].
- WILLCOX, M., F. BENOIT-VICAL, D. FOWLER, G. BOURDY, G. BURFORD, S. GIANI, R. GRAZIOSE, P. HOUGHTON, M. RANDRIANARIVELOJOSIA & P. RASANAIVO (2011): Do Ethnobotanical and Laboratory Data Predict Clinical Safety and Efficacy of Anti-malarial Plants? In: *Malaria Journal* 10(1): 1-9.
- WOLF, A. (2001): AIDS, Morality and Indigenous Concepts of Sexually Transmitted Diseases in Southern Africa. In: *afrika spectrum* 36(1): 97-107.

- WOLF, A. & A. VON ROENNE (2007): *Medical Dialogue. How to Kick-start a Joint AIDS Response by Health Workers and Traditional Healers*. Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).
- YAMBA, C.B. (1997): *Cosmologies in Turmoil: Witchfinding and AIDS in Chiawa, Zambia*. In: *Africa* 67(2): 200-223.
- YOUNG, A. (1983): *The Relevance of Traditional Medical Cultures to Modern Primary Health Care*. In: *Social Science and Medicine* 17: 1205-1211.
- YOUNG, S.L. & S.M. ALI (2005): *Linking Traditional Treatments of Maternal Anaemia to Iron Supplement Use: an Ethnographic Case Study from Pemba Island, Zanzibar*. In: Blackwell Publishing Ltd, *Maternal and Child Nutrition* 1(1): 51–58.
- ZANZIBAR MINISTRY OF HEALTH AND SOCIAL WELFARE (2006-2011): *Zanzibar Health Sector Reform Strategic Plan II*. Internet source: <http://www.healthresearchweb.org/files/Zanzibar%20Health%20Sector%20Reform%20Strategic%20Plan%20II%202007-2011.pdf> [accessed 2.10.2011].
- ZANZIBAR MINISTRY OF HEALTH AND SOCIAL WELFARE (2007): *Zanzibar Health Care Worker Productivity Study: Preliminary Study Findings 2007*: Internet source: http://www.intrahealth.org/-intrahea/files/media/health-systems-and_hrh/zanzibar_productivity_study.pdf [accessed 2.3.2012].
- ZANZIBAR MINISTRY OF HEALTH AND SOCIAL WELFARE (2008): *Zanzibar Traditional and Alternative Medicine Policy Act No. 8: The Traditional and Alternative Medicine (Code of Ethics, Conduct and Practice) Regulations*. Ministry of Health and Social Welfare.
- ZANZIBAR MINISTRY OF HEALTH AND SOCIAL WELFARE (2009): *Standard Treatment Guidelines Zanzibar*. Ministry of Health and Social Welfare in Collaboration with WHO. Internet source: <http://apps.who.int/medicinedocs/documents/s16505e/s16505e.pdf> [accessed 9.3.2012].
- ZANZIBAR MINISTRY OF HEALTH AND SOCIAL WELFARE ZMCP (2011): *Zanzibar Malaria Control Programme*. Internet source: <http://zmcp.go.tz/whoweare.php> [accessed 25.1.2012].

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