“HEALTH CARE PROVIDERS ALSO HAVE A CULTURE”
How cultural health beliefs of health care providers in the interior of Suriname relate to their delivery of health care

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HEALTH CARE PROVIDERS ALSO HAVE A CULTURE. How cultural health beliefs of health care providers in the interior of Suriname affect their delivery of health care.

A thesis submitted in partial fulfilment of the requirement for the degree of Master in International Health

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Suriname

Declaration: Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements. The thesis 'Health care providers also have a culture. How cultural health beliefs of health care providers in the interior of Suriname affect their delivery of health care' is my own work.

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List of abbreviations

ABS	General Bureau of Statistics (*Algemeen Bureau voor de Statistiek*)
ACT	Amazon Conservation Team
CMWO	Surinamese Central Committee on Research Involving Human Subjects (*Surinaamse Commissie Mensgebonden Wetenschappelijk Onderzoek*)
EM	Explanatory Model
FGD	Focus Group Discussion
KIT	Royal Tropical Institute (*Koninklijk Instituut voor de Tropen*)
MoH	Ministry of Health
PHC	Primary Health Care
RGD	Regional Health Care (*Regionale Gezondheids Dienst*)
VU	Vrije Universiteit Amsterdam
WHO	World Health Organization

Definition of terms

Cultural health beliefs	What people believe about their health, what they think constitutes their health, what they consider the cause of their illness, and ways to overcome an illness. Different cultures have different definitions of what constitutes health and what causes illness (Misra and Kaster, 2012). Cultural health beliefs influence health behaviours and health outcomes.
Health care provider	Midlevel healthcare provider, locally known as *gezondheidsassistent* (GZA).
Maroons	Tribal people of African descent, whose ancestors escaped slavery and established independent communities in the Suriname interior.
Medical Mission Primary Health Care Suriname	Main organisation providing health services in the interior of Suriname
Ndyuka	One of the six Suriname Maroon groups, whose traditional living territory includes the Tapanahoni River and part of the Marowijne River. Subgroups of the Ndyuka have established in Brokopondo district (also: Aukaners or Okanisi).
Non-spiritual health beliefs	Health beliefs that have no connection with the spiritual world.
Primary Health Care	Refers to the concept elaborated in the 1978 Declaration of Alma-Ata, which is based on the principles of equity, participation, intersectoral action, appropriate technology and a central role played by the health system (WHO, 2018).
Saamaka	One of the six Suriname Maroon groups. The ancestral territory of the Saamaka Maroons is the Suriname River (also Saramaka, Saramacca).
Spiritual health beliefs	Health beliefs shaped by the belief in the supernatural.
Winti	Traditional religion where animist and polytheistic, and ancestral spirit veneration plays an important role.

Local words

Bita	Bitter drinks made of pieces of bitter bark, root, wood, seeds and herbs infused in water or in alcohol.
Dresiman	Person with knowledge of traditional medicine.
Faya watra	Herbal steam baths to dry, clean and contract the vagina.
Loengasi	Type of grass (Paspalum conjugatum P.J. Bergius)
Mangasi	Type of grass (Eleusine indica (L.) Gaertn.)
Obia	Supernatural forces
Obiaman	Medicine man using the power of *obia,* religious practices developed among enslaved West Africans.
Oso dresi	Home remedies, local name for medicinal plants as well as other forms of traditional medicine.
Pimba	A white clay or chalk. Also: *pemba doti*

Abstract

Author: C. E. Duijves
Title: *Health care providers also have a culture. How cultural health beliefs of health care providers in the interior of Suriname affect their delivery of health care.*

Introduction: Culture influences the ways in which people perceive and deal with health. While much research has focused on culture in relation to patients, much less is known about how the culture of health care providers affects their professional work. This study explores cultural health beliefs of Maroon health care providers in the district of Brokopondo, Suriname, and their effect on health care delivery.

Methods: Qualitative data were collected through semi-structured face-to-face interviews with health care providers and key persons affiliated with the Medical Mission Primary Health Care Suriname, focus group discussions with patients, and observations of medical consults.

Results: Since the eighteenth century the Medical Mission provides health care in the interior of Suriname. Their health care providers mainly Maroon inhabitants of the rural interior, who follow a four-year training course in biomedicine. Existing cultural health beliefs and practices of health care providers and patients can be spiritual or non-spiritual. None of the health care providers expressed to belief in spiritual health beliefs but most of them did adhere to non-spiritual health beliefs in their private lives. Health care providers reported that during health care delivery they follow the formal biomedical protocols and guidelines, while simultaneously respecting the patients' culture. During medical appointments, culture was barely discussed.

Conclusion and recommendations: While health care providers abide by biomedical guidelines, cultural health beliefs continue to play an important role in their everyday lives. Health care providers who share the same culture as their patients can be blind for cultural health beliefs and practices of their patients that could harm their health. During training, little attention is paid to health care providers' own culture, and that of their patients. Recommendations focus on training and curriculum, processes and follow-up research.

Key words: Cultural health beliefs, culture, delivery of health care, Suriname, Medical Mission Primary Health Care Suriname

Word count: 11321

Samenvatting

Auteur: C. E. Duijves

Titel: *Gezondheidsassistenten hebben ook een cultuur. Hoe culturele gezondheids opvattingen van gezondheidsassistenten in het binnenland van Suriname betrekking hebben op hun gezondheids advies en werkwijzen.*

Introductie: Cultuur bepaalt de manier waarop mensen omgaan met gezondheid. Hoewel veel onderzoek zich heeft gericht op cultuur in relatie tot patiënten is er veel minder bekend over hoe de cultuur van zorgverleners hun professionele werk beïnvloedt. Deze studie onderzoekt culturele gezondheids opvattingen bij gezondheidsassistenten in het district Brokopondo, Suriname, en hun effect op gezondheidszorg.

Methoden: Kwalitatieve data is verzameld door middel van semi-gestructureerde face-to-face interviews met gezondheidsassistenten en sleutelfiguren verbonden aan de Medische Zending Primary Health Care Suriname. Daarnaast zijn er focusgroepen gehouden met patiënten en observaties uitgevoerd tijdens medische consulten.

Resultaten: Sinds de achttiende eeuw levert de Medische Zending gezondheidszorg in het binnenland van Suriname. Hun gezondheidsassistenten zijn voornamelijk Marrons uit het binnenland, die een vierjarige opleiding in bio-geneeskunde volgen. Bestaande culturele gezondheidsopvattingen en werkwijzen die bestaan onder gezondheidsassistenten kunnen spiritueel of niet-spiritueel zijn. Geen van de gezondheidsassistenten gaf aan te geloven in spirituele gezondheidsopvattingen en de meesten beoefenden niet-spirituele gezondheidsopvattingen in hun privé leven. Gezondheidsassistenten verklaarden dat zij tijdens zorgverlening de formele biomedische protocollen en richtlijnen volgen en respect hebben voor de cultuur van de patiënt. Tijdens medische consulten werd cultuur nauwelijks besproken.

Conclusie en aanbevelingen: Terwijl gezondheidsassistenten biomedische richtlijnen volgen, blijven culturele gezondheidsopvattingen een belangrijk rol spelen in hun alledaagse leven. Gezondheidsassistenten die dezelfde cultuur delen met patiënten kunnen blind zijn voor culturele gezondheidsopvattingen en werkwijzen van hun patiënten die hun gezondheid kunnen schaden. Tijdens de opleiding wordt er weinig aandacht besteed aan de eigen cultuur van de gezondheidsassistent en aan die van hun patiënten. Aanbevelingen richten zich op training en curriculum, procedures en vervolgonderzoek.

1. Introduction

Since 2009, I am living in Suriname, a country where I can speak my mother tongue, but where I can enjoy the Caribbean way of life. Living as a migrant in a multi-ethnic country is an enrichment, sometimes difficult, but overall an ongoing anthropological experience.

My interest in Maroon[1] culture and the impact of culture on health care are the starting point for this thesis. The fact that I regularly receive culturally informed health advice from professionals, especially with regard to my children's health, led to more deepening in the topic. Preliminary literature review resulted in numerous articles discussing health beliefs of patients and cultural competence, and cultural sensitivity of doctors trained in modern Western medicine. However, I could not find much data on the fact that health care providers have a cultural background too, which may affect how they look at diseases, how they communicate with their patients and how they perform their work in general. In this thesis, I explore how cultural health beliefs of health care providers in the interior of Suriname influence their delivery of health care.

Consultation with the staff of the provider of primary health care in the interior of Suriname, the Foundation Medical Mission Primary Health Care Suriname (hereinafter referred to as Medical Mission), helped me shape my research question and ensured that besides interesting research it also became useful to the national health sector. On a national level the topic links up with the principles described in Suriname's Development Plan 2017-2021 with regard to the use of non-Western cure methods and resources as part of difficult but necessary integration of non-Western medical-care and healthcare (Stichting Planbureau Suriname, 2017).

The aim of the thesis is to contribute to a better understanding of the relation between cultural health beliefs and health care delivery, and to deliver recommendations to be more systematically responsive to cultural health beliefs in Medical Mission's curriculum and health care policy. Results of this study will give an overview of cultural health beliefs within the health sector in the district of Brokopondo. Results cannot be generalized for the entire interior, but it is likely that results will show many similarities with other places Suriname where health care is offered within communities with strong cultural values.

1.1 Outline of thesis

After this introduction I present in chapter 2 the background of the study where a description of the national health system and more specifically about health in the research area is given. This chapter includes the problem statement, justification and objectives of the study. I then present my methodology in detail in chapter 3 and hereafter the theoretical concepts of cultural health beliefs and practices that have been applied in the analytical process. Chapter 4 consists of the analysis of collected data. In the

[1] *Maroons:* Tribal people of African descent, whose ancestors escaped slavery and established independent communities in the Suriname interior. In Suriname, six different Maroon groups claim traditional rights to different territories in the country's interior. The study area includes two different Maroon groups: Ndyuka (also: Aukaners, Okanisi), and Saamaka (also: Saramaka, Saramaccaners) Maroons.

discussion in chapter 5 I compare findings with existing literature and highlight the limitations of the study. The final chapter, chapter 6, presents the findings, conclusions and recommendations.

2. Background

2.1 Suriname

Suriname is situated on the northern shores of the South American continent and became independent from the Netherlands in 1975. The Surinamese population counts 558.369 individuals and is multi-ethnic, with the four major ethnic groups being Hindustani (27.4%), Maroon (21.7%) Creole (15.7%) and Javanese (13.7%) (ABS, 2012). The majority of the population lives in the coastal districts, which also includes the capital city Paramaribo. Thirty-four percent of the population lives in rural areas, also referred to as 'the interior' (World Bank, 2018). Interior districts are sparsely populated and largely covered with dense, minimally impacted tropical rainforest. The inhabitants of the interior are primarily Indigenous peoples (est. 10,000 pers.) and Maroons (est. 50,000 pers.) who live in villages along the major rivers that meander through the rainforest (ABS, 2012). Suriname's national language is Dutch but more than 16 other languages are spoken, including Sranantongo (also Sranantongo, the national Creole language) and languages pertaining to Indigenous, Maroon, and migrant groups.

2.2 The national health system

Suriname's national health system is centrally coordinated by the Ministry of Health (MoH) and is divided in three geographical areas: Paramaribo and its surroundings, the coastal area, and the interior. The majority of hospitals in the country are based in the capital with the exception of hospitals in Nieuw Nickerie and in Albina[2]. Three actors provide Primary Health Care (PHC): the Regional Health Service (RGD), the Medical Mission and general practitioners.

In 2014, the National Basic Health Insurance Law was passed, providing access to a basic package of primary, secondary, and tertiary care services for all residents of Suriname. It is mandatory to be covered by at least this national healthcare insurance. According to the World Health Organization's (WHO) latest data available, the total expenditure on healthcare is approximately 5.7 percent of the GDP (2014) (Table 1) Suriname has been experiencing a shortage of imported medication due to limited financial resources (personal communication, staff member Medical Mission, January 10, 2019).

Table 1. *Overview National Health and Population Data*

Indicator	Result
Total population (2016)	558.369
Life expectancy at birth m/f (years, 2016)	68/75
Probability of dying under five (per 1000 live births, 2017)	19.6
Probability of dying between 15 and 60 years m/f (per 1000 population, 2016)	224/135
Total expenditure on health as % of GDP (2014)	5.7

Source: WHO, 2017

[2] Not fully operational after soft-opening in 2018.

In 2017, the leading causes of death in Suriname were ischemic heart disease, stroke and diabetes. Alarming is the increase of deaths as a result of diabetes by 46.4% and Alzheimer disease 59.9% compared to 2007 data (IHME, 2018). Furthermore, Suriname's social, economic and health sectors are impacted by vector-borne diseases such as chikungunya, zika and dengue (Viliani and Srivastava, 2017).

2.3 Provision of primary health care in the interior

The main organisation providing health services in the interior is the Medical Mission, a non-governmental organization that depends on funding from the government, supplemented with necessary funding from donors. Another, considerably smaller, health care delivery organisation in the interior is the Ministry of Health Malaria Program.

The Medical Mission operates 56 rural health clinics (Figure 1) spread over an area of 130,000 km^2, serving about 54,000 people. Inhabitants of the interior are primarily Indigenous peoples who are the original inhabitants of Suriname, and Maroons who have lived in the interior since the 17th century. Medical Mission health clinics have no conventional doctor/nurse team for service provision. Midlevel healthcare providers, locally known as *gezondheidsassistenten* (GZA; health assistants) form the backbone of service delivery to the population of the many widely dispersed villages. Health care providers follow a comprehensive four-year training, which is partly theoretical but largely on-the-job and recognized by the Ministry of Health. The complete training contains all basic health skills, such as wound treatment, vaccination, malaria testing and treatment, delivery, and pre-and postnatal care. Apart from one or more health care providers, each local clinic may host clinic assistants (*polihulpen*) and microscopists, whose presence differs per clinic depending on size, need and availability. Moreover, some clinics permanently host a resort doctor and/or a regional head of clinic (*streekpolihoofd*). Each local team is overseen by a district coordinator and a resort doctor through an extensive network of communication (radio and when possible telephone) and regular, periodic visits. The greater part of the health care providers and clinic assistants are persons from interior communities, who speak the local language and are familiar with, and share traditional[3] customs and culture.

2.4 The research area

In the research area, the district of Brokopondo, the Medical Mission operates 11 clinics (Figure 1), all in Maroon villages. In these clinics, a total of 25 health care providers service a patient population of approximately 10,500 persons[4]. More details of the clinics are presented in Annex I.

[3] We have to bear in mind that the term traditional does not mean that customs are ancient and unchanged, but like every culture, are continuously changing.

[4] Data provided by Medical Mission department Monitoring, Evaluation, Surveillance and Research (per email, January 2019)

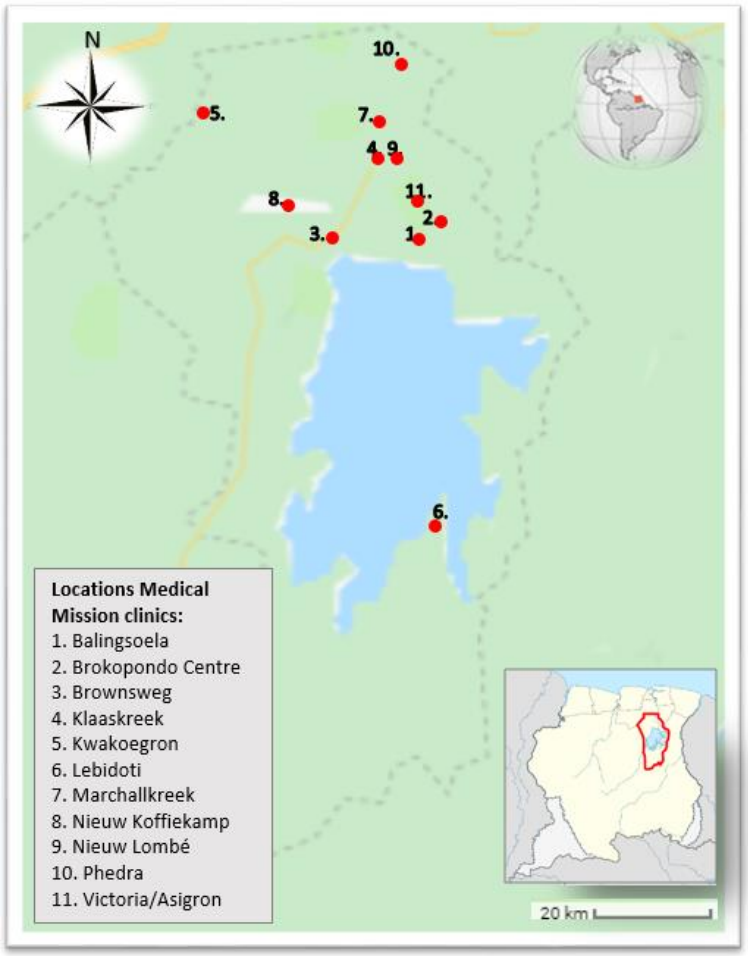

Figure 1. Overview of Medical Mission clinics in the Brokopondo district. Adapted by author from Google Maps, 2019.

The current district was instituted after construction of a hydropower dam that created the Brokopondo Lake as a water reservoir. The two main groups of Maroons living in the district are Ndyuka and Saamaka Maroons (Table 2).

Table 2. *Number of persons who self-Identified as Indigenous or Maroon during the 8th National Census, 2012.*

District	Indigenous		Maroons		Other		Total	
	N	% in District	N	% in District	N	% in District	N	% of total Suriname population
Brokopondo	120	0.8%	13172	82.8%	2617	16.4%	15909	2.9%

Source: From 8th national census (ABS, 2012)

Inhabitants of the Brokopondo district primarily visit the Medical Mission clinics because of chronic diseases (esp. hypertension and diabetes), prenatal care and child consultation (Viliani and Srivastava, 2017). Health indicator data is presented in Table 3.

Table 3. *Overview Health Data Brokopondo District 2011-2016*

Indicator	Result
Life expectancy at birth m/f (years)	56/63
Probability of dying under five (per 1000 live births) based on cumulative risk	64
Probability of dying between 15 and 60 years m/f (per 1000 population) based on cumulative risk	388/250
Top 4 leading causes of death period 2008-2014 according to PAHO ranking list of causes of death by ICD-10 chapters.	1. Diseases of the circulatory system 2. Neoplasms 3. Certain conditions originating in the perinatal period 4. External causes of mortality

Source: Data provided by Medical Mission department Monitoring, Evaluation, Surveillance and Research (per email, January 2019)

2.5 Maroons in Brokopondo District

Maroons are tribal people, who are the descendants of African slaves who fled from the plantations where they were forced to work under Dutch colonial rule. These run-aways established villages in the interior rainforests where they nowadays continue to adhere to many traditional cultural practices and speak their own Maroon language (Duijves and Heemskerk, 2017). Because of their history, cultural identity of Maroons differs from that of the rest of Suriname's inhabitants. Maroon form their own group and are seen by others as an apart group of people with deep knowledge of among others traditional medicine. Africa and African ancestors play an import role in Maroon culture but practices are adapted to their current environment and to what people have learned from Indigenous peoples and the New World.

The highest authority in Maroon groups is that of the Granman[5] (paramount chief) and villages have captains as leaders of the clan. The Maroon traditional religion is rooted in African belief systems, and in a generic term referred to as "*winti*". The animist and polytheist *winti* religion continues to be important and dictates many aspects of daily life, including rituals related to birth and death – and everything in between. Ancestral spirit veneration plays an important role too (Duijves and Heemskerk, 2017).

According to Maroon traditional religion, diseases and other forms of misfortune are typically caused by a disturbed relationship with the spiritual world or by some form of supernatural activity. Therefore, divination, consulting oracles, praying to specific gods and ancestors, libation, and other ritual activities are needed to both identify and apply a cure (Price and Price, 2017). Each village, or each lineage, has a number of active mediums – male and female-, often referred to as *obiaman* who may be consulted for divination or remedial action (Duijves and Heemskerk, 2017). There is a distinction between people who have extensive knowledge of medicinal plants, *dresiman*, and above described mediums who are in contact with spirits, *obiaman*. *Dresiman* can among others heal broken bones, treat headaches and

[5] Because of their location in Saamaka traditional territory, the Ndyuka and Saamaka Maroons fall under jurisdiction of the same Saamaka Granman.

wounds, and solve problems related to menstruation and pregnancy. Besides *obiaman* and *dresiman*, many Maroons have inherited knowledge of medicinal plants and use this in their everyday life.

2.6 Problem statement

It is by now widely accepted among scholars that culture influences the ways in which people perceive and deal with health. In the health-care domain, historically culture referred almost solely to the domain of the patient and family (Kleinman, 2006). Health beliefs are here understood as what people believe about their health, what they think constitutes their health, what they consider the cause of their illness, and ways to overcome an illness. Different cultures have different definitions of what constitutes health and what causes illness. Therefore, health beliefs influence health-related behaviour, practices and health outcomes (Misra and Kaster, 2012). Researchers have assessed the manifold ways in which cultural differences between health care providers and patients affect diagnosis, treatment, and care. For example, as Oleribe et al. (2007) have demonstrated in a study among Nupe people in Nigeria, culturally informed health care practices could both inhibit and promote effective care.

The Medical Mission in Suriname typically places health care providers, of whom the majority has a Maroon background, in a health clinic in their area of origin. This strategy is applied to ensure that care is consistent with cultural nuances that only those who are part of the culture can provide (personal communication, staff member Medical Mission, 10 March, 2017). This study hypothesizes that the cultural beliefs of Maroon health care providers influence their professional medical advice and practices.

The cultural beliefs of health care providers can influence their delivery of health care in various ways. For example, cultural health beliefs of health care providers can become a risk if health care providers give wrong advice or refrain from correcting (culturally informed) misperceptions. Health care providers can give medical advice based on their cultural health beliefs, such as the use of plants to wash, dry or clean the vagina– a popular practice among Maroon women in Suriname[6]. In this case, harmful advice is being given because these practices damage vaginal tissue and facilitates the spread of sexually transmitted diseases (van Andel et al., 2008). This thesis will explore existing health beliefs and practices of patients and health care providers, when they are applied and how social and cultural factors influence them.

2.7 Justification

To the researcher's knowledge, no previous research has been done on the cultural background of health care providers and the extent to which the cultural health beliefs of health care providers affect their delivery of health care. Studies have been conducted on biomedical-trained health care providers in relation to non-Western patients (Callan and Littlewood, 1998; Hoeman, 1989). These studies often discuss the ability of the health care provider to demonstrate cultural competence towards patients with diverse values and beliefs and how to reduce health disparities. However, little is known about situations where the cultural health beliefs and practices of a formally qualified health care provider are similar to those of the patient, but divert from those taught in Western medicine. As Akinlua and others have

[6] Reasons for engaging in such practices vary from hygienic considerations, prevention from post-partum infections to obtain a dry contracted vagina to enhance male sexual arousal and maintain partner fidelity (van Andel et al., 2008).

pointed out, because health care providers have been trained in the biomedical perspective, it is assumed that their perception align entirely with the biomedical model (Akinlua et al., 2016).

This thesis addresses the following research question: How do cultural health beliefs and practices of health care providers affect the delivery of health care in Medical Mission clinics in the district of Brokopondo, Suriname? More specifically, this study wishes to contribute to a better understanding of how health care providers in Suriname use their own cultural health beliefs in their delivery of health care.

2.8 Objectives

The general objective of the study is to explore culturally informed health beliefs of health care providers, and their potential effect on health care delivery. The specific objectives are formulated as follows:

1. To explore existing health beliefs and practices of health care providers in Medical Mission clinics in Brokopondo and patients living in the district.
2. To identify the social and cultural factors that influence health beliefs and practices of health care providers.
3. To identify when and how culturally informed health beliefs are applied/practiced in health care delivery.
4. To identify if culture related to health beliefs and practices gets attention during health care providers' education.
5. To develop recommendations to be more systematically responsive to cultural health beliefs into Medical Mission curriculum and health care policy.

3. Methodology

3.1 Research design

The research has a qualitative design. Multiple methods were used including face-to-face interviews (semi-structured), focus group discussions (FGD) and observations. The methods provided rich information about cultural beliefs and health practices and helped facilitate deeper understanding of subjects. Information from key informants completed the analysis. Data collection instruments were designed in Dutch. All data collection was executed by the main researcher. Data collection during interviews with key informants and health care providers was executed in Dutch. Focus group discussions with patients were mainly executed in Dutch but supplemented with Sranantongo/Saamaka/Ndyuka. Languages used by patients and health care providers during observation were Dutch/Sranantongo/Saamaka and Ndyuka[7]. Quotes used in the results were all translated to English by the researcher. All interview data was recorded on a tape recorder with the participant's permission and notes were taken. When respondents did not gave permission for recording, only notes were taken.

3.1.1 Qualitative interviews

Semi-structured interviews were conducted with six key stakeholders to understand their views on cultural health beliefs and health care delivery. Key informants included two heads of regional clinics (*streekpolihoofd*) and a resort doctor, all based in the Brokopondo district, a course coordinator/curriculum designer, a monitoring and evaluation officer and a high level staff member of the Medical Mission, all based in Paramaribo.

Additionally, face-to-face semi-structured interviews were conducted with fourteen health care providers employed in the Brokopondo district to gain detailed understanding of existing health beliefs in their working area, factors that influence culturally informed health beliefs (e.g. demographic factors, traditions, upbringing, family, religion) and the application and practice of culturally informed health beliefs.

In agreement with the resort doctor, the researcher visited the clinic of Brownsweg in the last week of October. In this week, a training was organised for a number of health care providers from the district. The majority of health care providers from the district was present and could separately be interviewed after the training sessions. Health care providers who were not attending the training were visited in the village where they stayed.

3.1.2 Focus Group Discussions

Four focus group discussions with patients, males and females separately, were executed in two villages. This number was enough to reach saturation, to gain meaningful insights and allowed the researcher to validate earlier acquired data. Focus groups were executed in Compagniekreek, a Ndyuka village served by the clinic of Brokopondo Centre, and Brownsweg, a Saamaka village served by the clinic of Brownsweg.

[7] Language knowledge of the researcher was sufficiently adequate.

Both clinics of Brokopondo Centre and Brownsweg were included in observation. Inclusion criteria were that respondents had used medical services from the local clinic of the Medical Mission more than twice in the past year.

3.1.3 Observations

The researcher visited two health clinics for observation and was present in each clinic for half a day. During this half-day visit, the researcher observed health care providers during health care delivery and made notes guided by an observation sheet. Informed consent from the health care providers (at the beginning of the day) and from individual patients (per medical appointment) were taken. Observations were executed in the clinics of Brownsweg and Brokopondo Centre. During observation of medical appointments where health care provider and/or the patient spoke Saamaka or Ndyuka, the researcher double-checked findings with the health care provider after the observation and in some cases asked for clarification. Clinics of Brokopondo Centre and Brownsweg serve respectively the villages of Compagniekreek and Brownsweg, where FGD were executed.

Research instruments are presented in Annex III[8].

3.2 Validity and reliability

Prior to use, the instruments were reviewed by staff of the Medical Mission, by the supervisor of the Royal Tropical Institute and by the ethical committee of the Suriname Ministry of Health and the Royal Tropical Institute. Data collection was conducted by the researcher only. Triangulation was used to verify accuracy by cross-checking information from multiple perspectives and through multiple methods.

3.3 Sampling

Purposeful sampling was applied. To identify key informants the researcher asked the Medical Mission for an overview of relevant employees (curriculum manager, doctors, and training facilitators) and selected respondents based on their function. Resort doctors were also selected based on their geographical working area. The researcher requested the Medical Mission to share an announcement of the study with all relevant stakeholders. An overview of health care providers was obtained through a list with locations of clinics and names of health care providers provided by the Medical Mission.

Data were collected in the period October - December 2018. At the time of research, a total of 25 health care providers were stationed at 11 clinics throughout the district of Brokopondo (Table 4). A resort doctor acted as an intermediary between the researcher and the health care providers, and was instructed about the background of the research and the importance of participation of health care providers. The resort doctor informed all health care providers about the research, the importance of the study, and that participation was voluntary but desirable. It was stated clearly that participation was anonymous and

[8] Consent forms of focus group discussions and observation (patient/health care provider) largely correspond with the consent form for interviews with health care provider. For this reason only one form has been added in Annex III.

information from the study would not be used as a performance evaluation with consequences for the respondents. This information was repeated in the informed consent procedure executed by the researcher.

The health care provider of Kwakoegron had just retired and her replacement was too short at the clinic to be able to participate in the study.

Data analysis started with working out and supplementing notes with recordings. Collected data was organised in Microsoft Excel, in particular according to the topics of the interview questions. Data was coded based on identified patterns.

Table 4. *Locations of Medical Mission clinics in Brokopondo District, total number of health care providers and number of interviewed health care providers.*

No.	Location	Total number of health care providers	Number of health care providers interviewed
1	Balingsoela	2	1
2	Brokopondo Centre	6	3
3	Brownsweg	6	3
4	Klaaskreek	2	1
5	Kwakoegron	1	0
6	Lebi Doti	2	1
7	Marchallkreek	1	1
8	Nieuw Koffiekamp	1	1
9	Nieuw Lombé	2	1
10	Phedra	1	1
11	Victoria/Asigron	1	1
	Total	25	14

For the four FGD with patients, four to six men and women per village were randomly selected in the village. The researcher made an effort to target patients of different subgroups in terms of clan and age. Inclusion criteria were that the respondent had used medical care at the local Medical Mission clinic more than two times in the past year and that this person was older than sixteen years.

3.4 Ethical considerations

Ethical approval was obtained from the Royal Tropical Institute and from the medical ethical review board of the Surinamese Central Committee on Research Involving Human Subjects (*CMWO, Surinamese Commissie Mensgebonden Wetenschappelijk Onderzoek*) (Annex II). All respondents received verbal and written information explaining in simple, non-technical terms the background of the study, what participating in the research would entail, any potential risks and desired benefits, and they were informed that they could withdraw any moment from the study without repercussions. All participants in the study have given written consent.

3.5 Analytical Framework

It has long been known that culture affects the ways in which people perceive, experience and approach physical and mental health. Little is known about the role of patients' and health care providers' cultural identities in health perceptions, although researchers widely agree that culture affects health care (Kleinman, 1980; Helman, 2000). The psychiatrist and medical anthropologist Kleinman (1980) proposes that "individuals and groups can have vastly different notions of health and disease". He introduces the concept of explanatory models of illness to refer to "the notions (beliefs) about an episode of sickness and its treatment that are employed by all those engaged in the clinical process" (Kleinman, 1980). Kleinman has presented this analytical framework to understand cultural dynamics of health care encounters.

In the past decades, anthropologists, sociologists, psychologists and public health researchers have explored how culture affects relationships between health care providers and patients (Callan and Littlewood, 1998; Hoeman 1989). Many of these studies have looked at how assumed 'culturally neutral' health care providers respond to cultural perceptions of patients. In these studies, patients are typically from non-Western cultures, while health care providers practice health care according to a Western model. For example, Kleinman proposes that patients' explanatory model influences receptivity to health promotion messages and health behaviours; both preventive and treatment seeking (Tirodkar et al., 2011). This study proposes that the health beliefs and practices of health care providers also are shaped by their cultural identity.

The explanatory models of both patients and health care providers are multifaceted, and formed by religion, ethnicity, education, socio-economic background and other dimensions of one's personality, upbringing and environment (Helman, 2000). Fitzgerald poses that in the process of becoming a health professional, practitioners undergo a transformation of their personal or familial explanatory model. They are submerged into a biomedical health culture, which, especially in the case of non-Western health care providers, may differ from what they have learned during their upbringing.

In his extensive work on multicultural health encounters, Fitzgerald (1992 and 1997) explores how conflicts may occur in the health professional-patient relationship due to the incompatibility of explanatory models. A number of studies have provided compelling examples showing that such incompatibility causes patients to disregard health advice (Putsch et al., 1990; Manassis, 1986). In this study, we look at a context where health care providers and patients originate from the same ethnic group. The explanatory model of the health care provider and the explanatory model of the patient are grounded in similar cultural health beliefs, but the health care provider has undergone biomedical health training that is supposed to give him or her a scientific, objective perspective on health. The explanatory model of health care providers is not exclusively designed by their medical education but also by their upbringing and socio-cultural environment. This study investigates the relative importance of cultural identity, and, on the other hand, biomedical health culture, in the explanatory models of health care providers. This is investigated in a context where the health care provider and patient originate from the same cultural community.

4. Findings

4.1 Medical Mission

Since the eighteenth century, the first missionary doctor arrived in 1740, the Medical Mission is providing health care in the interior of Suriname. Nowadays the organisation works according the principles of Integrated Primary Health Care. This work approach is explained as basic health care based on practical, scientifically founded and socially acceptable methods and techniques. The focus is people-centred, and community participation is an essential goal (Medische Zending, 2017).

4.1.1 Culture and health

According to a key person in the Medical Mission, respect for cultural diversity is present in all facets of the organisation, which is active in a working area with strong cultural values and works with a workforce of whom the majority has a Maroon background. With regard to their health care delivery, the relation of culture and biomedicine and how to deal with culture of patients has been a focus for years.

Twenty years ago, the Medical Mission already searched for the possibilities of the integration of aspects of traditional medicine into regular health care services. A key person illustrated that in those years a patient with Leishmaniasis[9] living in the working area of the Medical Mission could not be treated in his community. Patients had to travel to Paramaribo, often by plane, to visit a dermatologist four weeks in a row to receive an expensive injection. Buying an injection and administering it on site was financially not feasible for the Medical Mission. No less important was the financial and practical challenge for the patient who had to leave his family and the village for at least a month. The organisation investigated what the interior communities used to cure Leishmaniasis. According to a key person it found that Indigenous communities used treatment methods that were more suitable than what was offered by the Medical Mission. Nowadays there is a Memorandum of Understanding with the Amazon Conservation Team (ACT) with the overall idea that traditional medicine can contribute to the well-being of the people in the interior (personal communication, November 12, 2018).

The Medical Mission has learned from this cooperation, which showed that culture and biomedicine are not mutually exclusive. Another example that gives an idea of the organization's vision is the training of traditional midwives in recognizing alarm signals during pregnancy, hygiene, and awareness of the importance of prenatal control. According to a key person within the Medical Mission, all guidelines with regard to health delivery are described in the various protocols that the organisation has designed (personal communication, November 12, 2018).

4.1.2 Training and practice

Health care providers follow a four-year training course, during which they are made familiar with biomedicine and the mission, vision and goals of the Medical Mission. To enrol in the health care provider

[9] Leishmaniasis is caused by infection with Leishmania parasites, which are spread by the bite of infected sand flies (CDC, 2018)

training, a completed lower secondary school level C is required. An important selection criterion is affinity with the interior. In practice, virtually all health care providers are people with a Maroon, and to a lesser extend Indigenous, background and most of them (partly) grew up in the interior.

A high-level staff member of the organisation stated that this facet of the organisation is also their challenge, because the health care provider sometimes finds him/herself between two worlds, the cultural and the biomedical world. The original identity of the health care provider is shaped by many factors such as culture and socio-economic background. During health care provider training a transformation of this original culture takes place when the health care provider gets acquainted with biomedical health care.

As a health care provider conveyed:

> *I learned from my mother. My wife learned things from her mother. I hear of experiences from others and get advices from friends, family and older people. You have things in your culture, they are yours, you have to find a way to deal with this at home and at work (health care provider, male, 45 years old)*[10].

Health care providers are trained to follow protocols which are based on international biomedical guidelines, and adapted to the local context. Besides, the health care providers receive guidance on the job. Respondents explained that protocols do not provide guidelines on how to deal with health care providers' own cultural health beliefs and with health beliefs and practices of patients. During education, there is one subject that discusses culture: religious movements (*geestelijke stromingen*). There is no specific subject with regard to, for example cultural health beliefs or traditional medicine. Nevertheless, cultural aspects of health are frequently discussed during other subjects, but according to a key person perhaps not with sufficient depth. A key person who is in close contact with the health care providers stated that it is often emphasized that health care providers should follow the protocols. Health care providers in training often do not question what they learn, nor critically assess how their newly acquired skills and knowledge relate to their own cultural health beliefs and practices.

> *We as Medical Mission have to make sure the health care provider understands the content of the protocols because otherwise they cannot transfer the information to the patient in a correct and convincing way (personal communication, 8 November, 2018).*

Health care providers mentioned to be taught that specific cultural health practices are not scientifically proven to be effective and even can have a negative effect on the patient. An example is the use of *pimba*[11]' by pregnant women for soothing an upset stomach during morning sickness, and for supplementing nutrients (especially calcium), while it is said that the clay minerals can be toxic and soils contaminated by industrial or human pollutants pose considerable threat to anyone who eats them (de Korte, 2007). However, a number of respondents stated that as long as these practices do not cause any harm, they should consider to let the patient just do it.

A key person explained that

[10] All quotes were phrased in Dutch and translated by the researcher.

[11] A white clay or chalk. Also: *pemba doti*

> *…the policy is that the health care provider should follow the protocols. On the other hand, you should prevent that this leads to a barrier for a patient to visit the clinic. It is not black or white (personal communication, 8 November, 2018).*

Another key person added that

> *… not everything [cultural health practices] should be judged as wrong. The focus is on the patient as a whole, body and spirit. Especially sharing information with the patient is important. Besides the health of the patient, the health care provider should also pay attention to other factors, such as socio-economic circumstances that could influence the behaviour and attitude of the patient (personal communication, 12 November, 2018).*

Respect for the patient and his/her culture was named by the majority of the respondents as an important aspect of health care delivery. Nevertheless, traditional culture and cultural health beliefs are not an integral part of the curriculum. Health care providers were convinced that more training in cultural beliefs of patients and awareness of their own perceptions and practices would improve the quality of health care delivery.

Representatives of the Medical Mission endorsed these statements, but added that additional training, for example on the job, is challenging because of financial and geographical constraints. In addition to this, health care providers are boss in their own clinic and the Medical Mission cannot oversee health care providers in their working place. They only make contact with the resort doctor at their own initiative and if the health care provider sees no problem there is no communication with another representative of the Medical Mission.

A recent policy change to improve quality of care is focused on rotation of health care providers among clinics in the interior. The Medical Mission wants to realize that health care providers rotate more frequently to safeguard independence and objectivity. Furthermore, knowledge and practice must stay up to date, which can be realized if, in the rotation process, the strengths and weaknesses of the health care provider are linked to the characteristics of a clinic.

4.2 Cultural health beliefs in the district

Two groups of Maroons are living in the district, Ndyuka and Saamaka Maroons. As a result of their history in which they managed to escape from the plantations and created their own communities, Maroons tend to have a strong independent cultural identity and a source of pride and self-awareness (Smeulders, 2009). The essential origin of Maroon culture lies along the West African coast and taboos and rites of passage play an important role. Both groups continue to adhere to traditional cultural rites and customs, speak their own languages and their leadership structure is still organized according to a traditional system. Maroons are well known for their traditional medicine, which usually contains a mixture of plant ingredients (Duijves and Heemskerk, 2017).

Notable was the understanding of the word culture to the respondents with whom was spoken during data collection. Culture was often understood as *“culturu”*, and linked to the *winti* religion and less to all the characteristics common to a particular group of people. These characteristics were more often referred to as tradition. During interviews and focus group discussions both concepts of culture were

discussed. Cultural health beliefs related to *winti* religion are referred to as spiritual cultural health beliefs, cultural health beliefs that are not linked to ancestral spirits are in this study described as non-spiritual health beliefs.

4.2.1 Non-spiritual cultural health beliefs

Traditional medicine is popular among inhabitants of the Brokopondo district and is used for health promotion, disease prevention or to cure an illness (Klooster, 2016). Respondents explained that medicinal plants are often self-collected and prepared for washing, drinking, rubbing in, or to use as a compress. They also noted that most adult people in the villages have basic knowledge of medicinal plants, inherited from their parents and/or ancestors, or they use the knowledge of someone else in the village. The latter can also be the case if it concerns a more complicated recipe.

Many non-spiritual cultural health beliefs and practices exist specifically among women. Most common is the use of herbal steam baths (*faya watra*) to dry, clean and contract the vagina. Women in focus group discussions explained that most of the women in the community prepare this steam bath outside their house, in their cooking hut. Leaves and hot water are boiled and put in a bowl to sit on. For most women, this is a daily routine. This is such a normal part of life for women in the district that they often forgot to mention it during interviews claiming they were not practicing cultural practices. However, after more in depth questioning, probing and in some cases giving examples of cultural health beliefs respondents responded affirmative.

Especially during pregnancy and giving birth, cultural health beliefs are practiced. More than half of female focus group respondents stated that they eat *pimba* during pregnancy. A number of health care providers named the use of herbal drinks to make childbirth go smoother and to reduce pain. They explained that when they deliver at the clinic they are not allowed to bring herbal drinks because if anything goes wrong with the patient or the baby the health care provider will be held responsible.

> *Nothing is accepted at the clinic. Everything should happen at home. Health care providers and other patients use the same clinic. They cannot have the smell. You do not know what happens (Health care provider, female, 29 years old).*

> *I do not say that they cannot use it. In the clinic, they use crème to rub on their body, but they cannot drink dresi. You never know what it is made of (Health care provider, female, 35 years old).*

Women from the community explained in focus group discussions to be aware of the policy of the Medical Mission with regard to drinking herbal drinks at the clinic and stated that they do everything at home, however, they knew of women who brought herbal drinks in a thermos to secretly drink their drink.

> *Women here are accustomed to rubbing their body and drinking certain oso dresi when giving birth. We know that this is not allowed at the clinic, so we do it as much as possible at home. Everyone knows that you cannot drink oso dresi at the clinic. I do know that there are women who sometimes take it in a thermos and pretend it is water (Respondent FGD Brownsweg, females).*

After delivery, it is common that women use steam baths and drink bitter drinks (*bita*) to clean the uterus until three months after delivery. A male health care provider explained that during delivery a hut is prepared outside the house that is used for bathing mother and child. The mother needs massage because her body has become week, she also needs good food to become strong again. New-borns need herbal baths for a good and rapid development, to stimulate them being curious and active and to keep them healthy.

> *Babies in the community are bathed with herbs regularly to sit steady, walk early, and to prevent them from becoming ill (Health care provider, male, 45 years old).*

> *If the baby is approximately 1 year old and cannot walk yet than we use loengasie and mangasie, mixed with nine flowers from the okra plant to bath. This ensures the baby starts walking early (Health care provider, female, 35 years old).*

Other types of cultural health beliefs that were described by health care providers and participants in focus group discussions were applicable to both men and women. Non-communicable diseases, in particular high blood pressure and diabetes mellitus are often self-medicated with *oso dresi's*. People cook water with dry leaves and drink it as tea. Another example is the use of massage with natural oils/creams when having body pains, and traditional bone setting. The latter was frequently mentioned and respondents often showed admiration and were proud of the persons in their district who were capable of healing fractures. Respondents in focus group discussions and some health care providers explained that sometimes a combination of Western and traditional medicine is used. A number of people visit the Medical Mission clinic first after breaking a bone, because they want to be referred to the hospital for an X-ray. Afterwards patients bring the X-ray picture to the bonesetter. Similar is the behaviour after a snakebite.

> *When people come in with a snakebite, they only want Amoxil (antibiotics) and wet bandage. After that, they leave immediately to get the teeth out. I explain them the risks of not staying for observation, but I have to let them go (Health care provider, female, 43 years old).*

The district counts a number of *dresiman* who can take the teeth of a snake out of the skin after a bite incident. The remaining of the teeth is an often-named cultural health belief that causes patients to reject the advice of the health care provider to stay for observation at the clinic because they want to find a *dresiman* as quick as possible.

4.2.2 Spiritual cultural health beliefs

Respondents reported that it is most difficult to treat diseases that are, in the perception of the patient and/or the family, caused by spirits. Sometimes patients do not believe the diagnosis of the health care provider, they often are convinced the disease is caused by supernatural forces. According to respondents in a focus group discussion, the health care provider cannot cure cancer, because this is an evil thing. Spirits are part of *winti* religion, a religion in which ancestral spirit veneration plays an important role. People who believe in *winti* are convinced that a large part of sickness and illnesses are the result of avenging spirits. During a focus group discussion with men, a respondent explained:

There are two types of diseases, normal diseases for which you can go to the clinic and winti diseases that you can only cure with winti. Sometimes you know directly that something or someone 'gave' you the disease, or in other cases, you do not get better by Medical Mission or hospital treatment, than you know that, it has to be done differently (Respondent FGD Compagniekreek, male, 39 years old).

Spirits, also called "*obia*"[12], play an important role in the *winti* religion. Each *obia* asks for its own rituals, prayers, ceremonies and herbs to detect, pleasure, evoke or exorcise it (Kreukels, 2002). Spirits communicate through mediums such as an *obiaman*. According to the health care providers, a number of communities in the district have an *obiaman* who can be consulted to ask about the causes of the disease and who can help or guide in curing people. The *obiaman* has a profound knowledge of the medicinal plants, that play a crucial role in the *winti* religion, and combines this with rituals. The *obiaman* in one of the villages where a focus group was held, is well known and gets clients from other parts of Suriname and abroad (i.e. French Guiana).

Broadly, we can state that *winti* is dominant in non-Christian Maroon villages. In the Brokopondo district, these are most often the Ndyuka villages because the Saamaka were already early targeted by missionary activity. Nowadays, Jehovah's Witnesses, Evangelical Church (*Volle Evangelie*) and other religious denominations established themselves among the Maroons, also in non-Christian communities. Respondents indicated that these 'new' churches put pressure on their followers to abandon ancient traditions.

According to a respondent living in a non-Christian village:

Everything is becoming modern, we now have internet, but traditions and culture remain despite the modernization. Only the church ensures the disappearance of these things (Respondent FGD Compagniekreek, male, 39 years old).

A health care worker working in a Christian villages explained:

I was a health care provider in Lebidoti before I came here. There it happened a lot. Deep with tradition, trust in tradition. Here [in Christian village] there are more churches and therefore less tradition (Health care provider, female, 29 years old).

This distinction is evident in almost all interviews and focus group discussions; people choose for one or the other: the church, or *winti*. This is also clearly stated when asking about practices people perform themselves. A health care provider stated:

I was raised with culture, we practiced winti in the family but now I know that the church is the only thing that helps (Health care provider, female, 33 years old).

I know that if I take a pen, I can write with it. For cultural things, you do not know what it is and what you can expect. Medication and worship of God heals. Besides, God has made the leaves, but you do not know how strong you have to make it. With medication, you do know (Health care provider, female, 55 years old).

[12] In fact, *obia* has two meanings; it is the spirit or energy itself, which can take possession of a human being. It is also the name for magical medicine or amulets that are used as to communicate with these spirits and for protection against evil spirits.

4.2.3 Health care seeking behaviour

When people experience health problems they can come directly to the clinic, go to a person who communicates with spirits, or they can conduct cultural practices in consultation with a traditional healer or based on family/own knowledge. During the study, it was found that in many cases, patients select a combination of these options, varying in order. Most of the health care providers explained that they had the idea that the majority of their patients have health beliefs that are non-spiritual and that they use all kinds of traditional medicine, cultural but not linked to spirits, just because it is part of being Maroon. Besides, also depending on the characteristics of the village, a smaller proportion of patients believe in spirits and trusts in mediums.

> *Some people first use cultural practices, then go to the Medical Mission, others do it the other way around, and others combine it (Health care provider, female, 35 years old).*

There are specific problems with which patients reported to go directly to a Medical Mission clinic, for example when experiencing something 'different than normal' or when having malaria or asthma. When experiencing these complaints, it makes no difference if you have believe in spirits or not.

Health care providers said they most often ask the patient if 'they have used something before coming to the clinic'. It is not common that the patient talks about this on its own initiative. In some villages, the health care provider can reasonably assume that the patient has used or uses cultural health practices. This becomes clear when they arrive at the clinic.

> *In Lebidoti, every house has its tub with a herbal bath in front of the house. Some people come late at the clinic; the smell tells you that they have been bathing (Health care provider, female, 33 years old).*

> *I have many Saakiiki[13] patients; they are all busy with culture. Before they come to the clinic they are already full with pimba, they smell. Even at the clinic, they want to do cultural things such as drinking dresi (Health care provider, female, 29 years old).*

4.3 Cultural health beliefs and practices of health care providers

4.3.1 Characteristics and attitude of health care providers

Fourteen health care providers were included in the study, covering ten of the eleven clinics in the district. Most health care providers were middle-aged and female. Except for one health care provider, all interviewed health care providers were of Maroon descent, predominantly Saamaka Maroon. All health care providers claimed to be Christian, which is common among Saamaka Maroon people, and Maroons in Paramaribo and communities relatively close to Paramaribo. Mid-eighteenth century Christianity was introduced among Suriname Maroons and the Moravian and Roman Catholic Church are the norm in Christian communities. Health care providers who stated to be followers of the Evangelical Church had made this choice/switch at an adult age. Half of the group of respondents was predominantly raised in

[13] Ndyuka Maroons from the Sarakreek region

Paramaribo, the other half in the interior (incl. Paranam and Moengo). The majority worked already more than 5 years at the Medical Mission (Table 5).

Table 5. *Characteristics of interviewed health care providers of ten visited Medical Mission clinics in Brokopondo District (N_{total}=14).*

Characteristics	Specifics	Number of health care providers
Age in years	<30	1
	30-39	7
	40-49	2
	50-59	4
	Mean (*range*)	42 (*29-59*)
Sex	Male	4
	Female	10
Ethnicity	Ndyuka Maroon	2
	Saamaka Maroon	10
	Mix Ndyuka/Saamaka	1
	Indigenous	1
Religion	Roman Catholic	3
	Moravian Church	5
	Evangelical Church	6
Predominantly raised in city/area	Paramaribo	7
	Interior	7
Number of years at Medical Mission	<5	3
	5-10	5
	>10	6
	Mean (*range*)	17 (4-42)

The majority of health care providers grew up in a Maroon family where Maroon cultural practices were a day-to-day reality. Respondents explained that cultural health beliefs they experienced during their upbringing could be identified as non-spiritual, which they themselves also mentioned to practice nowadays. The geographical location where they were raised is no determining factor in their health beliefs and practices. Female health care providers seemed to be more involved in cultural health practices in their private life than males. A possible explanation for this observation is that women are the ones who become pregnant and who are most involved with the upbringing of their children, and lot of cultural health beliefs are pregnancy and new-born related.

All health care providers were familiar with non-spiritual health beliefs, especially herbal drinks and baths, regardless their religious affinity. The difference between non-spiritual and spiritual health beliefs became

very clear when asking why people did or did not do certain practices. Much was determined by the degree of involvement in the church. According to health care providers the Roman Catholic and Moravian church have a liberal approach towards cultural practices, while the Evangelical Church is dismissive. This explains why health care providers following Roman Catholic or the Moravian Church were having a different opinion against cultural health beliefs, especially spiritual ideas. A male health care provider and female health care provider affiliated with the Evangelical Church stated:

> *I became wiser and went deeper in religion. My confession was a benchmark to completely let go of all the cultural beliefs (Health care provider, male, 34 years old).*
>
> *I found the church. This is the only thing that helps against bad spirits (Health care provider, female. 33 years old).*

None of the health care providers expressed to belief in spiritual health practices. A large part named their affiliation with the church as main reason. However, even though the health care provider was not following spiritual health beliefs him/herself, in some situations these spiritual health practices were practiced in close proximity of the health care provider. For example one health care providers' father was an *obiaman* and other health care providers expressed they had close family members who believed very strongly in spirits.

4.3.2 Cultural health beliefs during health care delivery

During observations of medical appointments, the researcher noticed that few questions were asked by the health care provider to the patient about cultural health beliefs and practices. Little attention was paid to the topic, no questions, no advice and no discouraging, encouraging, or explanation of risks. Especially during medical appointments with pregnant women and with patients with high blood pressure, of whom we know they often conduct cultural practices, it was striking how little was discussed. The minimum communication between patient and health care provider is something that is common, according to key persons. Some health care providers asked for the use of *pimba* (pregnant patient) or drinking *oso dresi* (against high blood pressure) but after confirmation by the patient the health care provider responded with a 'better not do this', instead of explaining the risks of these practices.

What health care providers ask and how they respond varies from one health care provider to another. Some health care providers said to reject all cultural practices without further explanation, others said they try to advice the patient how to integrate cultural health beliefs with Western medicine and others try to explain the risks of (certain) cultural health beliefs and highlight the benefits of Western medicine.

> *I ask the patient if she has used this [traditional medicine] already, if so, then I advise the patient. My experience is that health care providers have to ask for this, patients do not often tell about the use of traditional medicine out of themselves (Health care provider, female, 35 years old).*

Health care providers differ in how they deal with cultural health beliefs. A health care provider noted:

> *I do not give cultural advices, I only advice according to the protocols. People can do what they want to do (Health care provider, male, 59 years old).*

> *People already practice cultural practices, they do not come to the clinic for this. They come for medical advice. I never give cultural advice at the clinic. I also explain the risks. For example, the danger of the use of hot water after a C-section and that they have to be careful with dresi for children. (Health care provider, male, 45 years old).*

During observation of medical appointments, it was noticed that patients spoke little with health care providers, only after asking a question by the health care provider the patient answered short. In general, health care providers explained they respect the culture of their patients. With every patient, they have to find a balance, respect the culture, explain Medical Mission views and prevent patients from not coming back to the clinic.

> *You have to understand the patient. You cannot say they have to stop it, but you can advise for example to use it once a month and explain they have to avoid stress, come for checks, and take medication. If you tell them not to do cultural things they will not come again (Health care provider, female, 33 years old).*

A Medical Mission doctor explained that for many cultural health beliefs and practices, health care providers are convinced that it cannot work but as long it cannot cause any harm the patient can do it. Risks of cultural health beliefs were occasionally discussed on the job. For example, it was conveyed that cultural health beliefs could lead to delay. The problem is that when health care providers refer people they still first want to do their cultural things such as taking herbal steam baths, which can take one to two days. Other examples of risk of cultural health beliefs are the use of vaginal steam baths that can damage tissue and can contribute to the spread of sexually transmitted diseases. In addition, for some *dresi's* it is necessary to use Palm[14]rum, this is not acceptable in combination with other medication or with specific health concerns. They explained that it is difficult to explain things to patients.

> *Sometimes you can give advice, not to practice cultural practices such as eating pimba, but during earlier pregnancies they have done the same and all went well. Especially with pregnancies, they often know better (Health care provider, female, 32 years old).*

> *Sometimes it is difficult; you are from the same background. Some patients are already done with you the moment they walk out the door. However, you have to keep on giving those advices (Health care provider, female, 34 years old).*

All respondents explained, although in different words, that the culture of the patient should be respected. Above all, they all know that the protocols of the Medical Mission, learned during the four years of training, are leading and advising and working outside these guidelines felt like violating the rules of the Medical Mission.

[14] Rum with a 90% alcohol percentage

5. Discussion and limitations

5.1 Discussion

This primary purpose of this study was to assess how cultural health beliefs of health care providers in the interior of Suriname relate to their delivery of health care. Earlier research suggests that culture affects the ways in which people perceive, experience and approach health (Kleinman, 1980; Helman 2000). Over the last two decades, the awareness of the extent to which a patient's cultural background can influence health care has been increasing. Numerous studies focused on the relation of a biomedical-trained caregiver and patients from different cultures and the physician's awareness of cultural context. Previous research often overlooked the effect of cultural health beliefs of the health care provider on health care delivery in a context where patients share the same culture. However, little is known about the cultural issues on the side of the health care provider.

All health care providers were familiar with cultural health beliefs and practiced non-spiritual health practices at home. In their approach to patients, however, they were loyal to the medical Mission protocol. It emerged that during health care provision, culture was barely discussed only when health care providers expected the cultural health belief and/or practice could do harm. In general, health care providers in Brokopondo followed biomedical protocols and guidelines and had respect for the patients' culture. For example, during delivery at the clinic, people could come with traditional crème and health care providers did not condemn patients who practiced cultural health beliefs.

The results contradict the expectation that health care providers in Brokopondo, who have a strong cultural identity, actively use their own cultural health beliefs in their delivery of health care. These health care providers notice, and often do tolerate and accept cultural health beliefs of their patients, but do not appear to pro-actively refer patients to traditional healers or tell patients to use traditional medicine. The data suggest that their training in modern Western medicine, and Medical Mission protocols for health care delivery, were decisive for their way of working.

The study reveals that inhabitants of the Brokopondo District have a strong cultural identity. This culture influences how they define health, how they manifest illness and how they decide upon the most appropriate course of action or treatment (Kleinman, 1980). We found that Maroon explanatory models for health and disease were largely conceptualized within a traditional cultural framework that often also encompassed spiritual factors. Many of the health care providers share the same Maroon culture as their patients because of their upbringing. Their knowledge and understanding of the context made them a suitable candidate to enrol in the four-year training course to become health care provider with the Medical Mission. Because of this training in modern Western medicine, health care providers were submerged into a biomedical health culture, which gave them a scientific, objective perspective on health. Their Maroon explanatory model for health and disease was largely affected or transformed to a biomedical explanatory model, emphasizing the biological and physical aspects of disease aetiology. This study suggests that explanatory models of health beliefs are fluid and people move back and forth in a continuum of traditional and modern.

Also another factor proves to be a direct contributor to changes in explanatory models and health care beliefs. Religion influences the extent and way people are involved in culture, specifically with regard to spiritual cultural health beliefs. The distinction between the attitude of the traditional church (Moravian

and Roman Catholic) and the new churches (Jehovah's Witnesses, Evangelical Church) must be mentioned. Traditional churches have a liberal approach but health care providers and patients who follow a new church had to abandon their Maroon explanatory model, in particular the spiritual aspects.

This study questioned whether cultural elements of explanatory models of health care provider came to the surface during health care delivery. All health care providers claimed they work according the protocols and do not give advice based on cultural health beliefs. However, even though the health care providers were familiar with the culture of the patient, they did not ask questions nor did they explain the possible risks of certain cultural practices. It could even be possible that health care providers are blind for some of these practices because they are part of their everyday life. Health care providers have to find a balance between their biomedical culture, their cultural Maroon upbringing and the Maroon culture of the patient.

When the patient has the idea that the health care provider has different views regarding the occurrence and treatment of the illness he may choose to believe his own judgment and doubt the judgments of the health care provider, especially when the health care provider cannot give enough explanation on the risks of cultural health practices. Besides, if the biomedical advice and treatment of the health care provider is not as effective as was anticipated it is even more likely the patient will blame the health care provider and turn to or stick with cultural health practices. Because different cultural health beliefs or explanatory models come together in a clinical interaction it is necessary the health care provider finds a balance between the Maroon explanatory model and biomedical explanatory model.

5.2 Limitations

The analysis of how cultural health beliefs of health care providers relate to their delivery of health care has some limitations.

For logistical, financial and time-technical reasons it was not feasible to execute this study in the far interior of Suriname, of which it is known that cultural health beliefs have an even stronger role within the communities. Data was collected in the district of Brokopondo and results of this study should not be considered representative for all health care providers throughout the country.

All quotes are translated from Dutch and in some cases from Sranantongo, Saamaka or Ndyuka. The researcher translated statements herself. The researcher is convinced translation has not affected the results although differences in nuance can have occurred because of translation.

Finally, because the respondent knows that there are protocols and that there is a distinction between culture and Western health care, it is plausible that some of the respondents gave socially desirable answers. All respondents explained, although in different words, that there is some room for culture and that the culture of the patient should be respected but it felt like giving cultural advice would be a bit like crossing a 'biomedicine' border. For this reason, interviews were supplemented with observations and focus group discussions with patients. Health care providers were observed during health care delivery, and although they were not aware of the exact points of attention, they were well aware of them being observed. It is likely that the presence of the researcher affected the behaviour of the health care providers and hence what was observed. A longer and more intensive presence of the researcher at the clinic could have led to the health care provider being less aware of the presence of the researcher and could possibly make more cultural health practices visible. Focus groups with patients provided additional

information and were used to validate earlier acquired data. However, it proved difficult for people to remember if cultural health beliefs of the health care provider had played a role in health care delivery. More in-depth interviews of the researcher with patients who frequently visit the clinic could be valuable, especially if the reason for the visit would be pregnancy, postnatal control or another cause or disease associated with cultural health beliefs.

6. Conclusion and recommendations

6.1 Conclusion

This study explored how health care providers in the interior of Suriname approach their own cultural health beliefs in a primary health care system imbued with Western biomedical perspectives.

Cultural health beliefs cannot be neglected in a district inhabited by Ndyuka and Saamaka Maroons who have a strong cultural identity, distinct from the remainder of Suriname society. Existing cultural health beliefs vary from taking vaginal steam baths to drinking *bita* and are believed and practiced by both health care providers as patients who both share the same cultural identity. It emerged that Maroons –and also other Surinamese- distinguish spiritual and non-spiritual health beliefs, where spiritual health beliefs are based on belief in the animist and polytheist *winti* religion. Many Maroon inhabitants of the Brokopondo communities, including all health care providers, accept non-spiritual health belief as an unalienable part of their tradition, while spiritual health beliefs were associated with paganism and often strongly denounced.

Affiliation with a church, in particular one of the new churches such as Jehovah's Witnesses or Evangelical Church was a strong determining factor for having –or not having- spiritual cultural health beliefs and practicing them. Whereas the Roman Catholic and Moravian churches that have missionized in Suriname since the 18th century did not repel believers in traditional Maroon religion, the new churches force people to choose; one is either exclusively with this church, or a non-believer. One consequence of this dichotomous vision, is that spiritual health beliefs have become detached from the cultural health practices that merely work with plants and herbs. All health care providers in the study practiced non-spiritual health beliefs to a greater or lesser extent, but no one of them reported belief in the *winti* religion as a healing force. Even though many christened Maroons continue to believe that evil supernatural forces may affect health, they seek the answer in prayer to the Christian God, rather than to their traditional pantheon of Gods and ancestors.

It is noteworthy that interviewees associated the word "culture" (*culturu*) with the traditional Maroon Winti religion and all rituals and practices around it, including those who used to heal people mentally and physically. The use of herbal steam baths, washing with herbal extracts, and eating *pimba*, by contrast, was seen as "tradition" – something that has nothing to do with ancestor veneration or other non-Christian practices and thus acceptable for anyone – including health care providers.

The hypothesis can be partly rejected because in general, health care providers in Brokopondo follow biomedical protocols and guidelines. On the other hand, cultural health beliefs are part of their identity and cannot be viewed in isolation from health care delivery. That health care providers share the patients' culture has the obvious benefit that the health care provider understands and may anticipate on specific cultural health beliefs and practices, and can discuss these beliefs without alienating the patient. On the other hand, however, sharing the same culture can make the health care provider blind or non-reactive to common cultural practices. As a result, potentially harmful cultural health practices, such as eating *pimba*, may not be actively discouraged or discussed, because it is so normal to the health care provider – who may also do this at home. In this context, it could be useful if training of health care providers would place more attention to their own existing health beliefs, and on how to effectively, and in a culturally sensitive way, communicate with patients about safe and unsafe cultural health practices.

This study assumed that the cultural beliefs of Maroon health care providers influence their delivery of health care.

Results can be used to emphasize that culture works on both health care provider and patient level and that small additions to policy and training can contribute to the improvement of Medical Mission's health care delivery acknowledging cultural health beliefs. To conclude, because most research within health care has focused on culture among patients, this research contributed to a more in-depth understanding of the influence of culture on the side of the health care providers' health care delivery. That being said, we argue that for a comprehensive understanding of the ways in which culture influences health care delivery, ideally research needs to focus on both sides and their interaction.

6.2 Recommendations

The following recommendations, divided into three themes, are proposed to the Medical Mission:

Training and curriculum

1. Add a subject 'Cultural competence' to the curriculum and discuss and explore health care providers cultural competence that goes beyond ethnic and cultural differences of their patients but also focusses on awareness of their own cultural identity.
2. Discuss and train communication and in-depth interview techniques with attention for cultural heath beliefs and practices for medical appointments. Especially if the patient's visit is because of pregnancy, postnatal control or another cause or disease associated with cultural health beliefs.
3. Provide more on-the-job assistance and training to strengthen health care providers and to prevent them from becoming boss in own clinic.

Procedures

4. Implement the rotation policy consistently to safeguard objectivity of health care providers.
5. Use the existing project 'training of traditional midwives' as an example for working with traditional bonesetters.

Further research on cultural health beliefs and practices in health care.

6. Conduct a study on the mapping of risks of cultural health beliefs and practices. Share results with health care providers and include results and solutions in their training. Based on study results, awareness activities can be organised in the communities involving village members and where applicable *dresiman* or *obiaman*.

References

Akinlua, J., Meakin, R., Bashir, I., and Freemantle, N., (2018). Beliefs about hypertension among primary health care workers and clients in Nigeria: A qualitative study. PLOS ONE. 13. e0209334. Available from: https://doi.org/10.1371/journal.pone.0209334 [Accessed January 2019].

Algemeen Bureau voor de Statistiek, 2012. National Statistical Office - Censusstatistics 2012. Available from: http://www.statistics-suriname.org/index. php/statistieken/downloads/category/30-censusstatistieken-2012 [Accessed October 2018].

Andel, T.R. van, Ruysschaert, S., de Korte, S., Koopmans, D., Behari-Ramdas, J.A. and Niekoop, L. (2008). Het gebruik van vaginale stoombaden door Surinaamse vrouwen. Nederlands Tijdschrift voor Obstetrie & Gynaecologie 121: 242-246.

Callan, A. and Littlewood, R. (1998). 'Patient satisfaction: ethnic origin or explanatory model?' International Journal of Social Psychiatry 44 (1): pp. 1-11.

De Korte, S. and Andel, T. (2007). The use of traditional health care in obstetric care by Creole women in Suriname.

Duijves, C. and Heemskerk, M. (2017). Cultural Resources Survey, produced as part of the Sabajo ESIA. Social Solutions, ILACO, Suriname

Fitzgerald, M.H. (1992). '*Multicultural clinical interactions*', *The Journal of Rehabilitation* 1: pp. 1-7.

Fitzgerald, M.H., Beltran, R., Pennock, J., Williamson, P. and Mullavey-O'Byrne, C. (1997). Occupational therapy, culture and mental health. Parramatta, Australia: Transcultural Mental Health Centre.

Helman, C. G. (2000). Culture, Health and Illness. 4th. Boston, MA: Butterworth-Heineman.

Hoeman, S. (1989). 'Cultural assessment in rehabilitation nursing practice', Nursing Clinics of North America 24 (1) pp. 277- 289.

Institute for Health Metrics and Evaluation (2018). Suriname Country Profile. Available from: http://www.healthdata.org/suriname [Accessed August 2018].

Irving, E.R., Svendsen E. R., Algoe, M., and Lichtveld, M. Y. (2014). Environment and health: Non-Communicable disease mortality trends as early indicators of environmental health threats.

Kleinman, A., Eisenberg, L. and Good, B. (1978). Culture, Illness, and Care: Clinical Lessons From Anthropologic and Cross-Cultural Research. Annals of internal medicine. 88. 251-8. 10.1176/foc.4.1.140.

Kleinman, A. (1980). Patients and Healers in the Context of Culture. Berkeley, CA: Univ of California Press.

Kleinman, A. and Benson P. (2006) Anthropology in the Clinic: The Problem of Cultural Competency and How to Fix It. PLoS Med 3(10): e294. Available from: https://doi.org/10.1371/journal.pmed.0030294 [Accessed October 2018].

Klooster, C.V., Andel, T.R., and Reis, R. (2016). Patterns in medicinal plant knowledge and use in a Maroon village in Suriname. *Journal of ethnopharmacology, 189*, 319-30.

Kreukels, K. (2002). Winti: je voelt het wel maar je ziet het niet. In: Bijeen. Jaargang 35, Volume 9.

Manassis K. (1986). The effects of cultural differences on the physician-patient relationship. *Canadian family physician Medecin de famille canadien*, *32*, 383-9.

Medische Zending Primary Health Care Suriname (2017). History. Available from: http://www.medischezending.sr/mz/historie/ [Accessed January 2019].

Oleribe, O. and Datonye, R. (2007). Culture and health: the effect of Nupe cultural practice on the health of Nupe people. *Nigerian journal of medicine: journal of the National Association of Resident Doctors of Nigeria. 15. 325-8.*

Price, R. and Price, S. (2017). Saamaka Dreaming. Durham, NC: Duke University Press, 2017.

Putsch R. W. III and Joyce, M. (1990). Dealing with Patients from Other Cultures. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths. Chapter 229. Available from: https://www.ncbi.nlm.nih.gov/books/NBK340/ [Accessed January 2019].

Smeulders, V. (2009). Exhibiting the Heritage of Slavery: Slavery Heritage Production and Consumption in Suriname and Curaçao', in: *Living History: Encountering the Memory of the Heirs of Slavery*, edited by A. Araujo. Newcastle upon Tyne: Cambridge Scholars Publishing. 2009.

Stichting Planbureau Suriname (2017). Ontwikkelingsplan 2017-2021. Available from: https://www.planningofficesuriname.com/wp-content/uploads/2017/05/OP-2017-2021-Ontwikkelingsprioriteiten-van-Suriname-1.pdf [Accessed October 2018].

Tirodkar, M. A., Baker, D. W., Makoul, G. T., Khurana, N., Paracha, M. W., and Kandula N. R. (2011). Explanatory models of health and disease among South Asian immigrants in Chicago. *Journal of immigrant and minority health*, *13*(2), 385-94.

Viliani, F. and Srivastava, V. (2017). Baseline Health Status: Suriname. International SOS. Available from: https://s1.q4cdn.com/259923520/files/doc_downloads/sabajo/2018/Sabajo-Baseline-Study-Health-Status.pdf [Accessed July 2018].

Vossen, T. (2014). Consequences of the Trans-Atlantic Slave Trade on Medicinal Plant Selection: Plant Use for Cultural Bound Syndromes Affecting Children in Suriname and Western Africa. Available from: https://www.researchgate.net/publication/267804422_Consequences_of_the_Trans-Atlantic_Slave_Trade_on_Medicinal_Plant_Selection_Plant_Use_for_Cultural_Bound_Syndromes_Affecting_Children_in_Suriname_and_Western_Africa [Accessed November 2018].

World Bank (2018). Rural population as a percentage of total population. Available from: https://data.worldbank.org/indicator/sp.rur.totl.zs [Accessed August 2018].

World Health Organization (2017). Country Profile and Statistics. Available from: https://www.who.int/countries/sur/en/ [Accessed November 2018].

World Health Organization (2018). Main Terminology. Available from: http://www.euro.who.int/en/health-topics/Health-systems/primary-health-care/main-terminology. [Accessed November 2018].

Annex I Characteristics of clinics

	Location of clinic	Approx. distance from Paramaribo (KM)	Approx. distance from Paramaribo by car (Hrs.)	Number of health care providers	Number of patients (Medical Mission, 2019)[15]
1	Balingsoela	95 KM	1.5 hrs.	2	635
2	Brokopondo Centre	105 KM	2 hrs.	6	1984
3	Brownsweg	107 KM	2 hrs.	6	3592
4	Klaaskreek	85 KM	1.5 hrs.	2	1367
5	Kwakoegron	95 KM	2 hrs.	1	220
6	Lebi Doti	150 KM	3.5 hrs. (car and boat)	2	1376
7	Marchallkreek	72 KM	1.5 hrs.	1	122
8	Nieuw Koffiekamp	100 KM	2 hrs.	1	217
9	Nieuw Lombé	85 KM	1.5 hrs. (car and boat)	2	591
10	Phedra	73 KM	1.5 hrs.	1	109
11	Victoria/Asigron	104 KM	2 hrs.	1	333

[15] Data provided by Medical Mission department Monitoring, Evaluation, Surveillance and Research (per email, January 2019)

Annex II Permission Medical Mission and ethical approval KIT and Ministry of Health Suriname

mz
Primary
Health
Care Suriname

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Bankrelatie:
DSB : 0830283 (SRD)
RBTT : 12846127 (Euro)
Hakrinbank: 5883814 (US$)

Paramaribo, 1 november 2017

Aan: Mw. C. Duijves

Refnr: C144/17/cw
Betreft: Toestemming voor het verrichten van een onderzoek t.b.v. studie

Geachte mevrouw Duijves,

In antwoord op uw schrijven van 23 oktober 2017, willen wij het volgende onder uw aandacht brengen.

Vanuit onze organisatie verlenen wij u toestemming om een afstudeer onderzoek, door het interviewen van MZ-medewerkers in de regio Brokopondo te verrichten, ter afronding van uw studie International Health. Wij wijzen u ten overvloede erop dat conclusies over percepties van zowel gezondheidswerkers als cliënten uit de regio Brokopondo, niet gegeneraliseerd kunnen worden voor het totale binnenland.

Uiteraard zien wij de thesis met aanbevelingen tegemoet.

Verder wensen wij u succes toe met de afronding van de studie.

Met vriendelijke groeten,

Namens de directie,

MEDISCHE ZENDING mz Primary Health Care Suriname Zonnebloemstr. 45-47 Tel.: 499466 P.O.B. 4086 Dr. Jan van Mazijk Coördinatie Centrum

Drs. E. van Eer, MD, MPH
Algemeen directeur
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Our reference KIT Health Amsterdam, 13 March 2018

Subject Decision Research Ethics Committee on Proposal S86

Dear Celine,

The Research Ethics Committee of the Royal Tropical Institute (REC) has reviewed your application for ethical clearance for the proposal "Culturally defined health beliefs of health care providers in the interior of Suriname and how they are related to their health advice and practices". This was resubmitted 13 March 2018 and REC is pleased to see that you have addressed our concerns and questions to our full satisfaction.

Kind regards,

P. Baatsen,
Chair Research Ethics Committee, KIT

Mauritskade 64
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Royal Tropical Institute

Ministerie van Volksgezondheid
in
Suriname

Directie en Centrale Administratie

Paramaribo, 20 Juli 2018

No.: VG09-18
Bijlage :
Onderwerp: Culturally defined health beliefs of health care providers in the interior of Suriname and how they are related to their health advice and practices.

Aan: mevr. C. Duijves
Alhier

Beste mevr. Duijves,

Middels deze deel ik u mede dat het Ministerie van Volksgezondheid bovengenoemd protocol heeft voorgelegd aan de Commissie Mensgebonden Wetenschappelijk Onderzoek. Naar aanleiding van het advies van de Cie. wordt u toestemming verleend voor het uitvoeren van bovengenoemd onderzoek.
Dit onder de volgende voorwaarden:

1. U zult de verzamelde gegevens met de grootst mogelijke discretie behandelen.
2. Verzameld materiaal zal alleen voor dit onderzoek gebruikt worden.
3. Het ministerie zal na afronding van het onderzoek en voor publicatie van enig resultaat, een rapport van u ontvangen.

Ik wens u veel succes met de uitvoering van uw onderzoek.

Met vriendelijke groeten,

Mevr. M. Wijngaarde-van Dijk, MD, MPH

.....

Directeur Ministerie van Volksgezondheid

cc. Dr. S. Vreden, CMWO voorzitter

Annex III Research Instruments

Informed Consent Interviews with health care providers

Informatieblad en Mondeling Informed Consent Formulier voor individuele interviews

Titel: How do culturally defined health beliefs and practices of Health Care Providers relate to the delivery of health care in Brokopondo, Suriname?

Onderzoeker: Celine Duijves, student Master International Health – Koninklijk Instituut van de Tropen, Amsterdam

U bent uitgenodigd om deel te nemen aan een studie die zich richt op cultureel bepaalde gezondheidsopvattingen in Suriname. We verstaan hieronder culturele zaken die gebruikt worden in relatie tot gezondheid zoals bijvoorbeeld het advies pimba te eten tijdens de zwangerschap en het advies vaginale stoombaden te gebruiken.

Dit informatieblad zal de studie schriftelijk aan u uitleggen. Ook zal ik vandaag met u over de studie praten. U kunt met me meelezen via de kopie die ik u heb gegeven. Nadat ik u heb uitgelegd wat de studie inhoudt zal ik u vragen of u mee wilt doen aan de studie of niet. Ik zal u als u meedoet een kopie van dit informatieblad meegeven naar huis. U kunt zich op elk moment terugtrekken zonder repercussie.

Doel van de studie

Wat is het doel van de studie? Het doel van de studie is om na te gaan hoe cultureel bepaalde gezondheidsopvattingen van gezondheidsassistenten, die werkzaam zijn in de klinieken van de Medische Zending in Brokopondo, invloed hebben op de gezondheidszorg in Brokopondo. Er is weinig informatie over dit onderwerp beschikbaar en resultaten zullen met de Medische Zending worden gedeeld met als uiteindelijk doel hun gezondheidsdiensten nog meer te verbeteren.

Er is aan u gevraagd vandaag deel te nemen aan de studie omdat u ideeën en meningen heeft die mij kunnen helpen inzicht te krijgen in de situatie.

Wat gaat er gebeuren als ik deelneem aan het interview?
Als u er mee instemt deel te nemen aan de studie zal u gevraagd worden deel te nemen aan een individueel interview. Als onderdeel van het interview zal ik als onderzoeker met u praten en met uw toestemming zal ik ook audio opnames maken.

Er zal u gevraagd worden te praten over:

- Cultuur
- Gezondheid
- Culturele gezondheidsopvattingen
- Gezondheidszorg vanuit de Medische Zending

Ik wil graag meer weten over uw ideeën en ervaringen wat betreft cultuur en gezondheid. Er is geen goed of fout antwoord. Antwoorden zullen geen invloed hebben op uw relatie met de Medische Zending.

Hoe lang zal het interview duren? Het zal 1 tot 1,5 uur duren.

Vrijwillige deelname en Recht tot terugtrekken
Wat zijn mijn rechten als studie deelnemer? Uw deelname aan deze studie is volledig vrijwillig. Als u besluit mee te doen aan de studie mag u uw deelname op elk moment stoppen; dit zal uw relatie tot de

1

Medische Zending of mogelijke deelname in een ander project van de Medische Zending niet beïnvloeden, ook heeft het geen invloed op uw toegang tot diensten. Als u besluit deel te nemen bent u vrij om vragen over te slaan. Uw beslissing zal niet met anderen worden besproken. Het is aan u of u deelneemt aan het project.

Risico's of ongemakken
Wat zijn de risico's van de studie? Ik verwacht geen risico's van deelname aan de studie.

Vertrouwelijkheid

Zal mijn deelname aan deze studie vertrouwelijk worden behandeld? Informatie die wordt gedeeld tijdens het gesprek zal vertrouwelijk worden behandeld en alleen beschikbaar zijn voor de onderzoeker. Nadat de opname is uitgetypt zullen we de opname verwijderen en de aantekeningen vernietigen. Elektronische data zal op computers bewaard worden die vergrendeld zijn met een wachtwoord en informatie in hardcopy zal in een kantoorruimte die wordt afgesloten worden bewaard. Er zullen in het eindrapport en in eventuele andere publicaties geen namen worden beschreven.

Wat zal ik ontvangen voor deelname? Deelname is vrijwillig, er is geen financiële vergoeding.

Wat zal er gebeuren met de resultaten van de studie? Antwoorden en commentaren zullen niet op zichzelf gepresenteerd worden. Ze zullen onderdeel zijn van een rapport wat een algemeen beeld zal geven van cultuur en gezondheidsopvattingen in Brokopondo.

Wie heeft de studie beoordeeld op ethische kwesties? Deze studie is beoordeeld door de ethisch commissie van het Koninklijk Instituut van de Tropen, Amsterdam en het Surinaams Ministerie van Volksgezondheid.

Wat als ik meer informatie nodig heb? Als u vragen hebt over deelname aan deze studie of schade ondervindt als gevolg van deze studie neem dat contact op met de onderzoeker. U kunt gebruik maken van de contactinformatie hieronder.

Wat als er een probleem is? Als u vragen hebt over uw rechten als onderzoeksonderwerp in deze studie kun u contact opnemen met de hoofdonderzoeker. U kunt gebruik maken van de contactinformatie hieronder.

De onderzoeker binnen deze studie is: Celine Duijves, antropoloog en master student, studierichting International Health. U kunt haar bellen als u vragen of bedenkingen hebt over deze studie op telefoonnummer (597) 8130399 of via email op celineduijves@hotmail.com.

Als u vragen hebt over uw rechten als deelnemer aan deze studie, over ethische zaken of als u een klacht wilt doorgeven kunt u contact maken met de Voorzitter van de Commissie Mensgebonden Wetenschappelijk Onderzoek op CMWOheatlh@gmail.com, welke deze studie heeft beoordeeld en goedgekeurd.
U kunt ook contact opnemen met de ethisch beoordelingscommissie van het KIT Royal Tropical Institute.

Interviewer: Beantwoord de vragen van de participanten over het interview voordat er verder wordt gegaan met de volgende vraag.

INFORMED CONSENT AUTHORISATIE

Interviewer: Vraag en noteer antwoorden op elke vraag door het aankruisen van het juiste vakje ☐

1. U hebt de uitleg gelezen/of de uitleg is u voorgelezen over deze studie, u hebt een kopie gekregen van dit formulier, u hebt de mogelijkheid gehad vragen te stellen, en u weet dat u kunt weigeren deel te nemen. Ik zal u toestemming vragen deel te nemen aan dit interview. Door ja te zeggen stemt u in met deelname aan het interview. Door nee te zeggen ziet u af van deelname aan het interview. Stemt u er mee in deel te nemen aan dit interview?

   ☐ JA, stem in deel te nemen aan het interview.
   ☐ NEE, weiger deel te nemen

2. Stemt u in met opname of weigert u opname van dit interview?

   ☐ JA, stem in met audio opname tijdens deze sessie.
   ☐ NEE, weiger audio opname van deze sessie.

Handtekening van de participant: _____
Datum: _____

Ik heb het doel en de procedures van de studie uitgelegd aan de deelnemer van het interview en we hebben alle risico's besproken. Ik heb alle vragen van participanten naar mijn beste vermogen beantwoord.

Naam van persoon die consent verkrijgt: _____

Handtekening: _____

Datum: _____

Hartelijk dank

General Topic Guide for Semi-structured interviews with health care providers

General Topic Guide voor Semi-structured Interviews met Gezondheids Assistenten (GZA's)

Area of inquiry	Guiding questions	Prompts
Introductie	Naam Leeftijd Geslacht Godsdienst Etniciteit Opgegroeid in Organisatie Functie Aantal jaar werkzaam bij organisatie Werkgebied(en) afgelopen 5 jaar Andere cursussen/opleidingen gevolgd?	Geografisch
Culturele gezondheidsopvattingen	Welke culturele gezondheidsopvattingen in Brokopondo kent u? Wat zijn de meest voorkomende culturele gezondheidsopvattingen in Brokopondo?	Probe op pimba bij zwangerschap, vaginale stoombaden Per thema één voorbeeld: - Eten - Drinken - Objecten - Kruiden - Rituelen Noem 3 en beschrijf

Toepassen van culturele gezondheidsopvattingen	Wat bepaalt of mensen gezondheidsopvattingen toepassen of juist niet?	Algemene vraag Probe op Afkomst, etniciteit, opvoeding, ervaring, verwachtingen, etc..
	Welke culturele gezondheidsopvattingen past u zelf toe en bij welke klachten/in welke situatie?	Persoonlijk en binnen het gezin. Noem 3 aandoeningen en beschrijf adviezen.
	Geeft u deze zelfde adviezen aan patiënten met vergelijkbare klachten?	Zo ja, waarom? Zo niet, waarom niet?
	Geeft u dit advies in plaats van of aanvullend op een biomedische oplossing?	Indien voorgaande vraag met ja is beantwoord.
	Wat zijn culturele gezondheidsopvattingen van andere GZA's in de Medische Zending klinieken?	Noem 3 aandoeningen en beschrijf adviezen.
Invloed en ervaringen	Waar hebt u uw gezondheidsopvattingen geleerd en van wie?	
	Zijn er dingen gebeurt die ertoe hebben geleid dat deze opvattingen zijn versterkt of verzwakt?	Toegetreden tot een kerk? Genezing?
Traditionele genezers	Wat is de rol van traditionele genezers in het dorp?	
	Maken mensen gebruik van traditionele genezers en zo ja bij welke klachten?	Zo ja, waarom? Zo niet, waarom niet?
	Hoe gaan GZA's om met traditionele genezers en hun traditionele geneeswijzen?	
	Wat is het beleid van Medische Zending met betrekking tot traditionele genezers?	Mag er worden doorverwezen?

Training en opleiding	Wat hebt u in uw opleiding tot GZA geleerd over cultuur en culturele gezondheidsopvattingen? Is er in aanvullende trainingen aandacht aan besteed? Wordt er in de praktijk door Medische Zending aandacht besteed aan culturele gezondheidsopvattingen?	
Aanbevelingen	Wat zou de houding moeten zijn van Medische Zending met betrekking tot culturele gezondheidsopvattingen en toepassing hiervan? Welke aanbevelingen heeft u voor Medische Zending met betrekking tot dit thema?	
Vragen	Is er nog iets wat u wilt toevoegen? Hebt u nog vragen?	

General Topic Guide for Semi-structured interviews with key-informants

General Topic Guide voor Semi-structured Interviews met Sleutel Informanten

Area of inquiry	Guiding questions	Prompts
Introductie	Naam Organisatie Functie Aantal jaar werkzaam bij organisatie Etniciteit Godsdienst	
Betrokkenheid onderwerp	Wat houdt uw functie in? Hoe bent u betrokken bij de gezondheidszorg in het binnenland? Hoe bent u betrokken bij de werkzaamheden van de GZA's?	Vraag specifiek naar Brokopondo.
Culturele gezondheidsopvattingen	Welke culturele gezondheidsopvattingen kent u? Wat zijn de meest voorkomende culturele gezondheidsopvattingen onder Marrons in Brokopondo? Komen deze opvattingen voor in Brokopondo?	Probe op pimba bij zwangerschap, vaginale stoombaden Per thema één voorbeeld: - Eten - Drinken - Objecten - Kruiden - Rituelen Noem 3 en beschrijf Zo niet, kan respondent andere opvattingen beschrijven?

Toepassen van culturele gezondheidsopvattingen	Wat bepaalt of mensen (GZA's, patiënten) gezondheidsopvattingen toepassen of juist niet? Houden GZA's rekening met culturele opvattingen van de patiënt? Bij welke aandoeningen wordt er advies gegeven gebaseerd op culturele gezondheidsopvattingen?	Probe op Afkomst, etniciteit, opvoeding, ervaring, verwachtingen, etc. Zo ja, hoe? Zo nee, waarom niet? Noem 3 aandoeningen en beschrijf adviezen.
Invloed en ervaringen	Wat is de invloed van de culturele achtergrond en de gezondheidsopvattingen van de GZA's op het functioneren binnen Medische Zending? Wat zijn de ervaringen van Medische Zending met betrekking tot het toepassen/adviseren van culturele gezondheidsopvattingen door GZA's?	
Beleid	Wat is het beleid van Medische Zending met betrekking tot culturele gezondheidsopvattingen en toepassingen hiervan door GZA's? Wat is het beleid met betrekking tot traditionele genezers?	Mag er worden doorverwezen?

Training en opleiding	Wordt er door Medische Zending aandacht besteed aan het thema cultuur en culturele gezondheidsopvattingen? Komen onderwerpen terug in het curriculum van de opleiding tot GZA? Komen onderwerpen terug in aanvullende trainingen van GZA's?	
Aanbevelingen	Wat zou de houding moeten zijn van Medische Zending met betrekking tot culturele gezondheidsopvattingen en toepassing hiervan? Welke aanbevelingen heeft u voor Medische Zending met betrekking tot dit thema?	
Vragen	Is er nog iets wat u wilt toevoegen? Heeft u nog vragen?	

General Topic Guide for Observation in Medical Mission Clinic

Algemene Topic Guide voor observatie in MZ kliniek

Category	Guiding observations	Prompts
Verschijning	Leeftijdsgroep patiënt Geslacht patiënt Etniciteit patiënt	Kenmerken HCP bekend bij onderzoeker (leeftijd, geslacht etniciteit)
Verbale communicatie en interactie	Algemene communicatie HCP – patiënt en vv. Worden culturele gezondheidsopvattingen besproken door HCP en/of patiënt? Worden culturele gezondheidsopvattingen toegepast door HCP en/of patiënt? Bij welke klachten/in welke situatie? Welke adviezen worden gegeven door HCP? Hoe reageert patiënt op adviezen? Wordt er gevraagd of patiënt HCP begrijpt? Wordt er gesproken over traditionele genezers?	Vragen aan patiënt (toon, stelt vragen etc). Antwoorden patiënt (idem). Zo ja, welke? Kennis van HCP/patiënt Houding van HCP/patiënt Zo ja, welke? Ideeën met betrekking tot oorzaak, verloop van ziekte/aandoening. Zo ja, wat wordt besproken? Wordt er doorverwezen?
Fysiek gedrag en gebaren	Hoe gebruiken HCP en patiënt lichaam en stem om te communiceren? Emoties? Ondersteunen van verbale communicatie? Aankijken?	
Omgeving	Foto's, posters, andere materialen aanwezig gelinkt aan cultuur HCP/patiënt?	

General Topic Guide for Focus Group Discussions with Patients

General Topic Guide voor FGD met Patiënten

Inclusion criteria for the participation are that the person should have used services from the Medical Mission at least twice in the past year.

Area of inquiry	Guiding questions	Prompts
Introductie	Naam Leeftijd Geslacht Godsdienst Etniciteit Opgegroeid in	 Stam bv. Ndyuka, Saamaka
Culturele gezondheidsopvattingen	Wat zijn de meest voorkomende culturele gezondheidsopvattingen in Brokopondo?	Probe op pimba bij zwangerschap, vaginale stoombaden Per thema één voorbeeld: - Eten - Drinken - Objecten - Kruiden - Rituelen
	Wat bepaalt of mensen deze gezondheidsopvattingen hebben?	Mensen in het algemeen Probe op Geloof, opvoeding, ervaringen.
Ervaringen	Als u een Medische Zending kliniek bezoekt bespreekt u dan dat u culturele gezondheidsopvattingen toepast? Krijgt u van GZA's wel eens het advies culturele gezondheidsopvattingen toe te passen, zoals hierboven benoemd, of wordt dit juist afgeraden? Welke houding van GZA's met betrekking tot culturele	 Zo ja, noem aandoening en beschrijf adviezen.