CHAPTER III RESEARCH METHODOLOGY & ANALYTICAL MODEL

3.1 The Ethnoscience Methods

In line with the reference to 'Ethnoscience' as introduced in the theoretical orientation (see par. 2.2), the method is partly based on anthropological schools (*cf.* Eriksen & Nielsen 2001) and engages in a combination of ethnographic fieldwork with the analysis of the interaction between individuals as well as with their environment.

The approach was redefined and operationalised through the Leiden Ethnosystems and Development (LEAD) Programme of Leiden University (*cf.* Slikkerveer & Dechering 1995). In the methodology there are three distinctive components, which consist of The Participant's View (PV), The Field of Ethnological Study (FES) and the Historical Dimension (HD).

The FES concept is related to the definition of a 'culture area', which refers to the inhabitants sharing common ancestry (kinship), language, lifestyle, values, symbols, rituals and history. It enables them to identify with each other, possibly even with different ethnic groups within one geographical area which becomes regarded as an entity as a result of that (*cf.* Slikkerveer 1999).

The historical dimension (HD) is constructed on the descriptions delivered through oral transmission by the community members, combined with data from historic recordings; in as far as these are available in a society without a written tradition before the nation building era. In the Serengeti research area, there is a combination of retrospective recordings through clerical and colonial administration, pre-independence anthropological fieldwork, and current oral transmission by the elders of local communities. The complexity of this combination is in the absence of chronologically consistent and coherent documentation, as most was collected on individual initiative without structural co-operation or objective verification (*cf.* Shetler, 1998).

Although currently there is a large collection of manuscripts in academic repositories, there are inconsistencies with current local individual sources on the earlier history, especially pre-colonial periods. The method is a combination of qualitative and quantitative measures through semi-structured interviews with key-informants, daily interactions and participant observation regarding services at health facilities, complemented by a large-scale household survey. There are observations from daily participation in activities and interaction with members of the community. The underlying principles focus on 'Indigenous Knowledge Systems' (IKS) (*cf.* Slikkerveer 1993), *i.e.* the framework of reference handed down from generation to generation, supplemented by acquired knowledge through experience.

A second principle is the '*emic'* (inside view) versus the '*etic view'* (outside view), where the perception of the individual with regard to his daily life phenomena and the related knowledge systems becomes the starting point for analysis. These methods are applied simultaneously and complementary, and do not have pre-conceived emphasis or hierarchy. Its main contribution is in the use of a comprehensive and bottom up approach contributing to community and health care development, with the objective to use the beliefs, perceptions and practices of local people in local policy and decision making *(cf.* Ibui 2007; Leurs 2010; Ambaretnani 2012; Chirangi 2013; Aiglsperger 2014; Erwina 2019; Saefullah 2019).

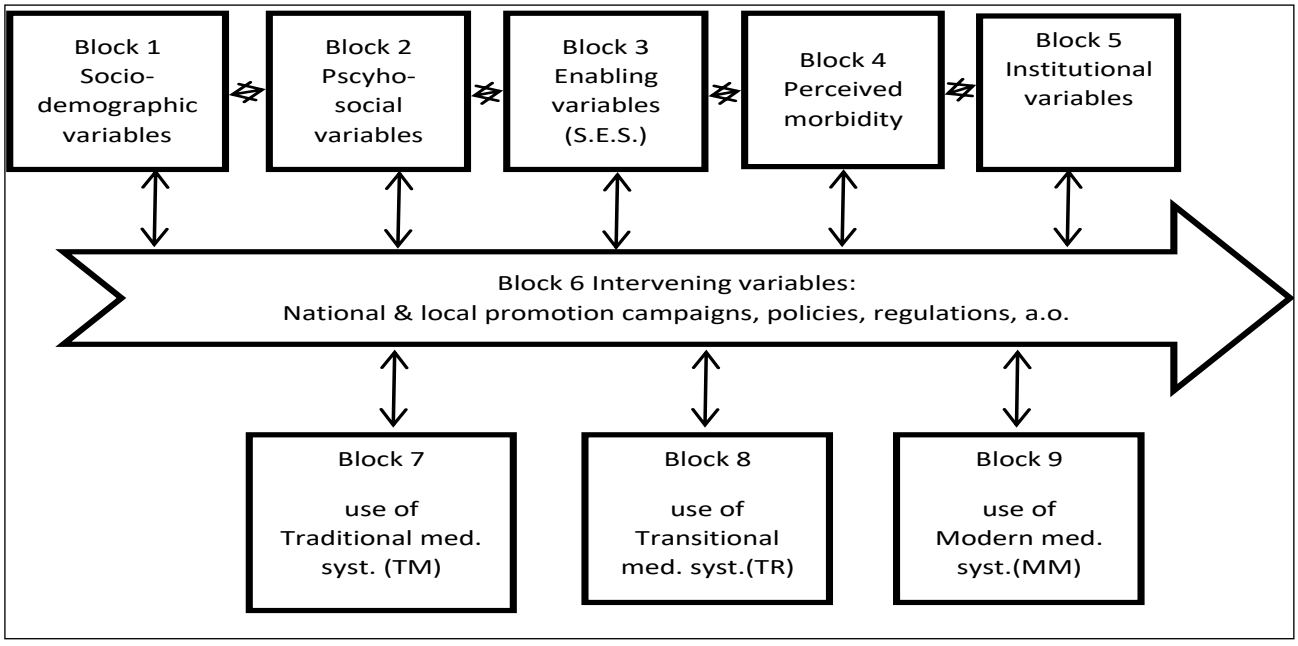
As is demonstrated in the next paragraphs this methodology is the basis for the design of the research tools, whereby all dimensions have one section attributed to them, to enable analysis of possible relationships between the dimensions afterwards. The Ethnosystems method is

interdisciplinary by nature, as it encompasses physical, demographic, psycho-social, socio-cultural and economic aspects in one movement. It is a mixed method as qualitative and quantitative methods are combined throughout.

3.2 Construction of the Conceptual Model.

Embarking on the model of health care utilisation of one dominant medical system, i.e. the modern medical system, studied in the U.S.A. and Europe by Kohn & White (1976), and later used in some developing countries, where the considerable utilisation of alternative systems of traditional medicine by the local population was largely ignored, Slikkerveer (1990) introduced a more realistic, ethnoscience-based model of transcultural health care utilisation in the Horn of Africa. This model proved rather successful in the analysis of utilisation behaviour of population groups in plural medical configurations, such as in the Mediterranean Region, South East Asia and Eastern Africa. As Slikkerveer (1990: p.63) concludes: *'In other words, patients consult several medical institutions concurrently or consecutively*.' In this model, the categories of independent, intermediate and dependent variables are located as 'blocks' of variables as to link up with the Ethnosystems Approach to identify different factors as variables in the model being significant determinants of the utilisation of different co-existent medical systems by the study population. In the design of the model for the study in Serengeti, the presumed relationships are shown between and among the nine blocks representing the independent (1 to 5), intervening (6) and dependent (7 to 9) variables with a view to allow the measurement of the level of significance (or non-significance) of the correlations among all variables. In the model, the plural medical systems in the research area are represented in the Blocks 7, 8, and 9, as reportedly utilised by the local population (*cf.* Figure 1).

Figure 1. Conceptual Model.



3.2.1 Multivariate Model of Transcultural Health Care Utilisation

Each of the blocks is translated into a section of the questionnaire used in the household survey. Each of the dimensions is operationalised into indicators which determine the value labels of variables. The indicators which are chosen for each variable are listed here below (table 1.). The actual values loading the indicators are not enumerated here for the purpose of compactness in the display, but they are structural to the questionnaire lay out, and represented as well in the cross tables of the bivariate analysis. Every section is described individually as well as its purpose in the multidimensional analysis.

3.2.2 Description of the Consecutive Variables:

The first section shows nominal and ordinal variables pertaining to the physical environment of the household and available assets, following socio-demographic and economic status definitions as they are used in regular social science research. They encompass housing, infrastructure, land area, livestock, as well as personal attributes such as gender, age, religion, marital status, education and the use of modern (communication-) media. The household members' relationships are also recorded in terms of genetic or extended family ties and co-existence within a physical household.

Table 1. Socio-Demographic Factors

Variables	Indicator categories	Measure
household size	number of members (up to 15)	ordinal
housing material	Stick and soil, cement brick, stones, other...	nominal
roofing material	Thatch roof, iron sheets, tiles, other…	nominal
land ownership	<1 acre up to 5> acres, 0.5-acre intervals	ordinal
poultry owned	1_3, 4_6, 7_9, 10>, three intervals	ordinal
cattle owned	<10, 11_20, 21_30, 30+, nine intervals	ordinal
type of toilet	Inside, outside annex, public facility, other…	nominal
water source	Well, piped, rainwater, dam, other…	nominal
media use	radio, television, mobile phone, internet, newspapers, other	ordinal
Gender	male, female	nominal
Age	0_5, up to 70+, 5-year intervals	ordinal
Group	ethnic affiliation, thirty local groups identified (listed)	nominal
religious affiliation	Christian, Islam, African traditional religion, other….	nominal
non-formal education	Private tutoring, Bible class, Koran lessons, cultural rites, other…	nominal
formal education	Primary, secondary, vocational, polytechnic, university, other…	ordinal
main occupation	Farming, herding, combined agric, trading, vocation, employment, non-skilled labour, other…	nominal

The second section displays the knowledge, opinions and beliefs with regard to the available medical systems, defined as 'traditional, transitional and modern', and the source of knowledge as in cultural origin, kinship and/or group influences. The subjective assessment of the medical systems can be related to the transfer of knowledge and experiences through interpersonal relationships within household, familial hierarchy, group or community. Top of mind awareness of types of symptoms, perceived morbidities, causes and prevention were recorded separately, on the basis of accumulated local terminology (*Swahili*).

Table 2. Psycho-Social Factors

Variables	Indicator categories	Measure
Knowl. of Traditional Medicine	none, little, average, much	ordinal
Opinion on Trad. Medicine	no opinion, low, average, high	ordinal
Belief in Traditional Medicine	none, little, average, much	ordinal
Knowl. of Trans. Medicine	none, little, average, much	ordinal
Opinion on Trans. Medicine	no opinion, low, average, high	ordinal
Belief in Transitional Medicine	none, little, average, much	ordinal
Knowl. of Modern Medicine	none, little, average, much	ordinal
Opinion on Modern Medicine	no opinion, low, average, high	ordinal
Belief in Modern Medicine	none, little, average, much	ordinal
Knowl. of Illness	listing of all current illnesses (TOM recollection)	nominal
Knowl. of prevention of illness	insects, poisoned food, contaminated water, hygiene, unsafe intercourse, weather conditions, anti-social behaviour, lack of rest, spells, micro-organisms, insulting ancestors, other…	nominal
Source of knowledge	Personal experience, parents, family, friends, traditional healer, health staff, education, other…	nominal
Advice for treatment consult	None, parents, family, friends, traditional healer, health staff, other…	nominal

Additionally, there is a qualitative indexation of which type of morbidity is directed towards which type of medical system on the basis of experience, reputation, or expected result through open ended questions listed in Table 2b. (Nr. 2.15 to 2.20 in that section of the questionnaire).

Table 2b. Indigenous Knowledge	Measure
What type of disease Traditional Medicine cures well?	Nominal
What type of disease Transitional Medicine cannot cure?	Nominal
What type of disease Modern Medicine cannot cure?	Nominal
What is your knowledge of home remedies (can you make yourself)?	Nominal
What is your knowledge of Transitional Medicine (commercial vendors)?	Nominal
What type of disease can be well cured in a hospital (or a clinic)?	Nominal

The answers to these questions will be processed as both quantitative (after being categorised post-hoc) for frequency, as well as qualitative, resulting in a syntax analysis for typology and prevalence. The outcome is cross-referenced with the results of interviews in chapter VI. The knowledge regarding home remedies is addressed separately in dedicated section in 6.4.

The third section provides the material context of access to the defined medical systems, both in terms of individual means available related to the socio-demographic attributes and social economic status, as well as the implications of utilisation, in this case the cost service delivery and cost of transport to a facility.

The status attribution by the research assistants is based on the presumption that income alone does not represent economic status per sé, (*cf.* De Bekker 2016) as personal preferences and additional material assets greatly influence the organisation of a household. The perception of Social Economic Status by the local research assistants is again qualified as ‘emic’.

Table 3. Enabling Factors

Variables	Indicator categories	Measure
Monthly income	<50.000 to 250.000 > intervals of 50.000	Ordinal
Additional income (non-occupation)	<50.000 to 250.000 > intervals of 50.000	Ordinal
Cost of Trad. Medicine	no opinion, expensive, average, cheap	Ordinal
Cost of transport to Trad. Medicine	no opinion, expensive, average, cheap	Ordinal
Cost of Trans. Medicine	no opinion, expensive, average, cheap	Ordinal
Cost of transport to Trans. Medicine	no opinion, expensive, average, cheap	Ordinal
Cost of Modern Medicine	no opinion, expensive, average, cheap	Ordinal
Cost of transp. to Modern Medicine	no opinion, expensive, average, cheap	Ordinal
Social Economic Status (*ascribed*)	very poor, poor, average, rich, very rich	Ordinal

The fourth section is based on the assessment of the health status by the individual household heads, the reported perceived morbidity by action patients within the last twelve months, and the experienced duration of the illness. The perceived morbidity is recorded in local terms. There is no distinction made between the reporting of symptoms and sets of symptoms attributed to specific morbidities, as they are maintained in the categorisation made by the respondents, irrespective of biomedical references or facility-based diagnosis.

Table 4. Perceived Morbidity

Variables	Indicator categories	Measure
Perceived health status	very bad, bad, average, good, very good	ordinal
Perceived morbidity	listing of all current illnesses (as quoted by respondent)	nominal
Illness duration	1_6 days, 1_3 weeks, 1_11 months, one year+	ordinal

The fifth section deals with the infrastructural and logistic implications of utilisation, referring to availability, proximity and the perception of the image and reputation of these systems. They are expressed in the type of facilities around, the distance to their location, and whether they are considered as socially acceptable, environmentally friendly, and economically efficient.

Table 5. Institutional Factors

Variables	Indicator categories	Measure
What type is environmentally friendly	Trad. Med., Trans. Med., Modern Med.	nominal
What type is socially acceptable	Trad. Med., Trans. Med., Modern Med.	nominal
What type is economically efficient	Trad. Med., Trans. Med., Modern Med.	nominal
What type of Trad. Med. is available	Home remedies, bonesetter, TBA, herbalist, spiritual healer, other…	nominal
What type of Transitional Med. is available	None, street drug vendor, market seller, pharmacy, other…	nominal
What type of Modern Med. is available	Medical doctor, nurse, midwife, VHW, clinical officer, dispensary, other…	nominal
What is the distance to Trad. Med.	1_4 km, 5_9 km, 10+ km, other….	Ordinal
What is the distance to Trans. Med.	1_4 km, 5_9 km, 10+ km, other….	Ordinal
What is the distance to Modern Med.	1_4 km, 5_9 km, 10+ km, other….	Ordinal

The sixth section, considered as intervening variables, intends to expose the impact of external information provided in two dimensions. The first one is the awareness of either local or national health education campaigns, the recollection of the topic and the type of media used. The second one is the distinction between commercially based promotional campaigns and health education campaigns from public health information by the local authorities. The recollection is recorded based on unassisted top of mind awareness, irrespective of time frames.

Table 6. Intervening Factors

Variables	Indicator categories	Measure
Local health education campaigns	Malaria, HIV, Pregnancy, (Top of Mind listing)	nominal
type of media used	Radio, TV, PA system, banners, newspapers, other…	nominal
available health insurance	National, local collective, private commercial, other…	nominal

Sections seven, eight and nine represent the dependent variables, expressed in either unique, repetitive, consecutive or simultaneous utilisation of one of the three defined medical systems. The categorisation of facilities within a medical system is done based on local consensus among research assistants and health professionals, explained in detail and presented in the bivariate analysis.

Table 7. Utilisation of Medical System (Block 7,8 & 9)

Variables	Indicator categories	Measure
use of Traditional Medical system	single, repetitive, or alternate use of facilities	Ordinal
use of Transitional Medical system	single, repetitive, or alternate use of facilities	Ordinal
use of Modern Medical system	single, repetitive, or alternate use of facilities	Ordinal

3.3 Organisation of Data Collection.

The data collection was done through two steps of combined qualitative and quantitative data gathering, using a household survey, and two separate series of key-informant interviews in the research area. Observations were made through repetitive visits to the health facilities in the area, as well as observations during health care delivery at certain stages during the facility surveying. A pilot survey was carried out in Mugumu as well as in Natta, both qualified as exemplary semi-urban and rural stations, regarded as representative for the Serengeti District by the Public Health Department in Mugumu. Data from both areas were compared for discovering a possible influence of peripheral health facilities, as compared to the availability of traditional medicine (TM) in rural, semi urban and urban settings.

The second stage household survey focusing on rural peripheral setting was chosen by the Public Health Department advisors to take place in Nyamburi, a settlement with a central section and satellite clusters of homesteads, encompassing several miles. On the directives of the Clinical Officer and the Ward Education Co-ordinator, the latter whom spent ample time in Nyamburi having been stationed there before, the research area was divided into four sections, assigned to each of the research assistants. They were teamed with a local assistant, assigned by the Village Executive Committee, to ensure that a proper introduction was done, and to provide proof of consent of the research by the VEO. Although two of the assistants were conversant with the Kurya language, the survey was officially conducted in Swahili, but transcriptions of Kurya were maintained whenever

local language expressions were used in relation to a symptom, an illness, or the description of local therapies or indigenous medicine. The four research assistants each delivered fifty questionnaires from their respective sections, of which twenty-five were later qualified invalid because of insufficient (missing) data, either as a result of lack of knowledge, insufficient detailed recollection by respondents, as well as incidental semantic differences leading to miscommunication qualified as such with consensus among the research assistants.

Table 8. Household Samples per Town Section

Town Section	N	%
Kiabakari (central)	47	26,8%
Saliganda	43	24,5%
Buchegera	42	24,0%
Mahembuhembu	43	24,5%
Nyamburi	175	100%

The sampling was done per town section by geographical distribution, trying to cover as much area as possible, guided by the principle of every third household. There was no stratification or segmentation apart from a reported morbidity by any one household member during the past twelve months. The questionnaire was directed at the household head, or the spouse, depending on who was identified as caretaker or main occupant of the residence at that particular time. Household size distribution within the survey is as follows:

Table 9. Number of Members per Household

Nr of Members	Nr. of HH	Total Members	%
1 member	1	1	0,6%
2 members	2	4	1,1%
3 members	9	27	5,1%
4 members	17	68	9,7%
5 members	20	100	11,4%
6 members	33	198	18,9%
7 members	27	189	15,4%
8 members	22	176	12,6%
9 members	19	171	10,9%
10 members	14	140	8,0%
11 members	4	44	2,3%
12 members	1	12	0,6%
13 members	2	26	1,1%
14 members	3	42	1,7%
15 members	1	15	0,6%
Nyamburi total	175	1.213	100%

The majority of the households consists of between 5 and 10 members (triple digit greyscale), representing a volume of 135 out of 175 (77%) and totalling 974 (80%) out of 1.213 members. The modus category is six members (18,9%) with a representation of 33 households (198 people).

While four academically trained research assistants were conducting the household survey, the principal investigator and the chief linguist, the Ward Education Co-ordinator, assisted by a female midwife-trainer from Kisare College of Health Sciences, conducted semi-structured interviews. The questions used were directly derived from the topics of the household survey questionnaire, without pre-defined categories, and reduced to questions pertaining to psycho-social factors, perceived morbidity, and institutional factors. Respondents were purposely identified key informants in the same area, partly through snowball sampling, partly through connections of the Public Health Department or the Ministry of Education, because every village had liaisons familiar with the WEC.

These key informants encompassed a number of societal sectors, including civil servants, health workers, schoolteachers, social workers, village executive committees, elders, religious congregation leaders, as well as local Traditional Birth Attendants and herbal healers. In some cases, civil servants were interviewed repeatedly, to enable a comment on topics raised during the interviews. This procedure provides an opportunity to explain operational procedures and logistic complexities, or express experiences from their individual viewpoint.

The interviews were done on site, and lasted between 1.5 to 2 hours, some were done repeatedly on separate occasions, while the linguists had complementary functions. In the case of TBA's the Kisare midwife trainer would conduct the interview in Swahili with the chief linguist assuring a proper translation into English. Transcriptions were made by the Principal Investigator and later reviewed together with the linguists, for completeness and semantics and edited before being compiled (see Chapter VI)

Listing of key informant interview questions (semi-structured sequence):

1) Do you use home remedies when you are ill? (free listing)
2) How did you acquire this knowledge? (type of relationship with consultant)
3) What do you consider the most important reason for their use? (categories: distance, treatment, cost, efficacy, access, belief)
4) What type of illness is regarded as not curable with modern medicine? (added to index)
5) How do you establish the difference between spiritual and psychosomatic diseases? (no pre-set parameter definitions)
6) Can you name a few of each category? (spiritual / psychosomatic)
7) What type of medicine do you prefer, and when? (categories: distance, treatment, cost, efficacy, service, attitude > type of morbidity)
8) Can you remember an unsuccessful treatment from your own experience? (respective next step)
9) What type of health care is for free?
10) What has changed most over time in terms of health care facilities in your personal experience?
11) Can you remember the most recent health promotion campaign? (12 months + medium)
12) What do you consider the most effective way of promoting health care in this area? (topic versus media, logistics)
13) What is currently the biggest health problem in your area? (free listing)
14) How do you perceive the difference between 'prevention' and 'protection' against illness?
15) Which type of illness can people not protect themselves from?
16) Which question do you have for the researchers?

In the process, the identification of home remedies listed by the key informants is added and compared with the same knowledge presented by the household heads in the household survey (questions 2.15 to 2.20). In the household questionnaire there is a similar open question based free listing where the local name is recorded, as well as the preparation and the mode of administering the concoction, followed by the symptoms it is applied for. There is a consistent syntax and semantic check over three languages, from the local language via Swahili to English, with the scientific botanical names ascribed post hoc through image material (see chapter VI).

3.4 Types of Analysis

3.4.1 Bivariate analysis

The first step consists of trying to establish the relationship between those variables which are considered to contribute towards utilisation. For that purpose, the utilisation of a particular medical system (as defined in block 7, 8 and 9) is transformed into one variable ('SYSTEM') and crossed with every other variable in the dataset. The level of measurement is set at 95% confidence level, and the significance is established by the strength of Pearson's Chi Square, combined with Cramer's V, or Pearson's R, dependent of the type of variable (nominal, ordinal, interval or ratio). The result leads to a ranking whereby the cross tabulation of the two variables reaches the set threshold, meaning that they combine a <0.05 significance with everything above 0.150 for Cramer's V, or Pearson's R above 0.30, and they are further examined in a multivariate staging. It is emphasised again that this correlation is not an indication of causality, but rather of co-variance. The results from the household survey are processed according to the format in the conceptual model. As such the multiple steps taken by a respondent are registered as individual records in the database. A respondent which takes three consecutive steps will have three records in the utilisation frequency data and is therefore represented three times in the calculations as it is the purpose to relate every step to the independent variables, regardless of which system was utilised. In that way the utilisation of a medical system can be directly related to all the other factors in the model, who receive their weighting accordingly.

3.4.2 Mutual Relations Analysis and Multiple Regression

The next step is to process the selected variables from each block and test the relationship between these sets of variables, based on the blocks as defined in the conceptual model. The procedure is known as Non-linear Canonical Correlation Analysis (*cf.* Meulman & Heiser, 2010) NLCCA, acronymed into OVERALS [17], because of the 'Alternating Least Squares' method. The underlying principles are similar to a standard deviation method, in calculating the average distance(s) between the objects in a multidimensional plot, where the distance is indicating the strength of the relationship. It is applied here for the quality of being able to perform an analysis regardless of the measurement level, which means that nominal and ordinal values can be calculated simultaneously (*cf.* Verdegaal 1986; v.d. Burg 1988; Dijksterhuis & van Trijp 1995; Vogelsang 2000). The essence of this method is that in this way all the actions of one single patient can be traced to the contextual attributes, as laid down in the independent, intervening and dependent variables. The outcome is to indicate which variables have the strongest impact on the

interrelationships which are suggested by the conceptual model. The indicator used in this type of analysis is called "Eigenvalue" (E_d) which is an equivalent of the percentage of variance being explained (*cf.* p.m. Burg, 1988). The formula to establish the ultimate impact of the correlation (ρ_d) between the sets is defined as $\rho_d = 2 \times E_d - 1$, i.e. the value of the coefficient is twice -over two dimensions- the Eigenvalue minus one. Chapter VII, dedicated to the data analysis, describes these steps extensively, whereby 175 households, containing 1.213 members, produced 564 action patients who collectively undertook 715 utilisation steps, across three medical systems.

3.4.3 Qualitative Data Analysis I: Interviews with Key-Informants

The semi-structured interviews conducted with the team of two linguists (one male, one female), were processed in two stages. Starting with condensed accounts of the interviews *(cf.* Spradley 1979; Luby 2013; Atkinson 2015) [16], these transcriptions were transformed into prose in consultation with the linguists, for post-hoc content verification and possible semantic differences. The interviews with local herbalist-TBA's were conducted with two linguists for a specific purpose: one to conduct the actual interview, the second to monitor the semantics involved in translating from Swahili to English or from local language speakers to Swahili. The transcriptions serve as a separate contextual reference to assist in interpreting the quantitative data, as well as an assessment of the perceived public health situation in the area complementing the Public Health Department's district profile. Transcripts of the individual interviews are presented in Chapter VI, deliberately not summarised, but left intact per respondent for the sake of providing additional background information. This procedure is in line with the principle of the Participant's View insights, following the LEAD ethnoscience methodology.

3.4.4 Qualitative Data Analysis II: Indigenous Knowledge and MAC plants

The therapies mentioned under the category of 'home remedies' in the questionnaire's open section -Block 2 psycho-social factors and indigenous knowledge- are listed, numbered, translated, and assigned the scientific name on the basis of images provided through the research assistants. These species, designated as Medicinal, Aromatic & Cosmetic (MAC) plants and therapies are verified by four traditional practitioners in the area for consensus on species identification and their ascribed *Igikuria* terminology. In two consecutive steps it is analysed whom the knowledge is acquired from by the respondent, the relationship to that person and the socio-demographic attributes of that person, to identify the source of knowledge. Then the species are matriculated for the type of preparation, the method of administering the prepared medicine, the perceived morbidities they are applied for, and where this is done in combination with other species. They are compared with available data from a similar cultural area to establish overlap, diversions or additions (*cf.* Gessler 1994; Owuor 2012). The botanic data are included as an indication of the current state of knowledge with regard to Traditional Medicine, to show the impact of the axiom of evidence-based medicine, as well as an object for future botanical or pharmacological investigation, which was repeatedly requested by both respondents and traditional healers. The research team were offered to take along prepared indigenous medicine to be subjected to investigation, which the team had to decline, as there was no facility to fulfil such task. Herbalists also indicated that preparation should preferably be done locally and ad hoc to ensure proper effectivity (see Chapter VI).

Notes chapter III

16. *'The anthropological method actively seeks to understand phenomena from the study subject's angle, to generate subjective knowledge. Using open-ended in-depth questions, they generate narrative which broadens the epidemiological understanding of what occurs in the community to a nuanced understanding of why it occurs. Such understanding is often crucial for developing interventions which are sufficiently relevant to the community to reduce disease risk'* (Luby, S., 2013, The Cultural Anthropology Contribution to Communicable Disease Epidemiology).
17. The Meulman & Heiser IMB SSPS Categories version 19 manual (2010) Chapter 4 explains the OVERALS procedure stepwise in prose, illustrated with the user interface images as produced on the screen in the software. It also presents the practical interpretation of the output through demonstration data tables. The reference is made here because manuals of later date do not provide software interface images with such level of detail.