TECHNOLOGY-ASSISTED PREVENTION OF DIABETES IN MAURITIUS

A THESIS BY
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SYNOPSIS:
Current thesis researches takes its' stand in the high prevalence of diabetes in Mauritius. The many cultural aspects of diabetes prevention in Mauritius has been explored through a Techno-Anthropological approach, which included a thorough literature review alongside with empirical data generation through fielwork. Two NGO's of Mauritius was taken into account in the matter of the prevention of diabetes. Moreover, it was analysed how the perspective of Health Literacy and eHealth Literacy can help in developing prevention programmes in the future

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OVERVIEW

PREFACE

I first visited Mauritius in the summer of 2015 during an anthropological summer school course with Aarhus University. The island is obvious to study as an anthropologist, due to the multi-ethnic society; one big melting pot of all the different cultures, brought to the island a long time ago, which has merged into one common culture. I was very fund of the Mauritian people, culture and the beautiful nature of the small island. I guess this is what anthropologists normally experience in their first meeting with a new culture. It was a bit like falling in love all over again. I knew that I had to come back and visit the island again. So I re-visited the island only few months after I left the first time, now as a newly hatched Master Student of Techno-Anthropology, and during this visit I decided that I wanted to study the Mauritian culture for my master thesis.

My focus of interest has since my first visit to the island been the huge amount of diabetics on the island. It was shocking to learn that the percentage of the people diagnosed with diabetes was nearly a quarter of the population compared to the Danish 5,7% of the population.[1] However it was not of any surprise after learning the Mauritian culture of food. Therefore, I decided to investigate the technology-assisted treatment of diabetes in Mauritius. This is how this project came alive and as it developed, the focus moved to the prevention of diabetes type 2. But as my interpretation enhanced and the love for the island changed during the process of conducting the project. And that is the flux of human beings. We change and keep changing. Also perspectives and focuses in life.

[1] Diabetes.dk | Diabetes i Danmark

INTRODUCTION

Present Master Thesis has been conducted during the 3rd and 4th semester of the Master of Science in Techno-Anthropology at Aalborg University. The fieldwork for the thesis has been conducted in Mauritius, an island in the Indian Ocean on the African Continent. What is interesting about Mauritius is the divergent society with different cultures and religions. It is a country of fast economic development, which is affecting the society in many different ways. One of them is the great western influence, which has great influence of the lifestyle of the Mauritian people.

Data was generated on basis of the current and rising Diabetes Mellitus issues of Mauritius, with a focus on the technology-assisted prevention of diabetes on the island. The data was generated in the two Mauritian NGO's *diase, Diabetes SafeGuard* and *T1 diams*, Doctor's Clinic's, and in everyday life during the fieldwork with help from professor Marie France Lan Cheong Wah (former known as Marie Chan Sun). Diabetes Mellitus is a rising problem in Mauritius both due to the changed lifestyle and only few intermittent and isolated interventions as addressed professor Cheong Wah. She stresses that there is a need for intensive pre-primary prevention in Mauritius. In this project data will be analysed and barriers to proper prevention will be discussed through the approach of health literacy. This master thesis will strive towards investigate which issues doctors and patients in Mauritius are facing in the technological assisted prevention of diabetes. The methodological approach of this research has been of Techno-Anthropological character.

PROBLEM ANALYSIS

MAURITIUS

The Republic of Mauritius, referred to as Mauritius, is an island in the Indian Ocean, and is accounted as a part of Africa. The island is 2040 square kilometres and was first discovered by the Arabs in the 900s, later the Portuguese came to the island while The Netherlands, who came to the island in 1598, was the first to colonise the island and named the island after Prince Maurits van NASSAU. The island has since been under influence of both France (in 1715), who introduced the sugarcane production, and lately England (in 1810). In 1968 the island became independent from England, and is no longer under influence of neither France nor England, thus the official language of the island is still English and the most commonly used second language is French.[2] Their political system is build upon the Westminster system of parliamentary democracy.[3]

POPULATION

Mauritius has 1,339,827 million citizens[4] and because of the influence of The Netherlands, France and England, the population is a big melting pot of people with ancestral background in the Southern Africa (def.: Creoles or Afro-Creoles), and India (def.: Indo-Mauritian), France (def.: Franco-Mauritian), and China (def.: Sino-Mauritian). The African part of the population has their roots in Madagascar, Mozambique, Malawi, Tanzania, and Zambia, and were imported as slaves by the Netherlands, thus after the banning of slavery by the French, a lot of African from Madagascar also arrived to the island as indentured labour. A large number of the Afro-

[2] CIA, World Fact Book | Mauritius, People & Society, Languages
[3] Republic of Mauritius, Government | National Assessment Report 2010
[4] CIA, World Fact Book | Country Comparison, Population

Creoles do have ancestral roots from Europe, due to many rapes in the period of slavery.[5] As just mentioned the French banned slavery, and they did this in 1835 and instead came along indentured labourers.[6] Most of the Indians who came to the island as indentured labourers have their roots in Bihar, and then some from Maharashtra, these are the Indo-Mauritians of the island. Of Indian immigrants, who arrived to the island after the period of indentured labourers, account people from Gujarat and Sindh in India.[7] The Sino-Mauritians have their roots in the small population of Chinese people of Sumatra[8], from where they were kidnapped, but also from Guangzhou: "In the 1780s, thousands of voluntary migrants set sail for Port Louis from Guangzhou on board British, French, and Danish ships[…]."[9]

As mentioned above, the official language is English, but statistics shows that English is not the language of priority. On CIA Wold Fact Book under the tap 'languages' it mentions the different languages of the island but ends with: "other [languages] 2.6% (includes English, the official language of the National Assembly, which is spoken by less than 1% of the population)"[10].

The vernacular language of the Mauritian people is Mauritian Creole, which derives from French mixed with Afrikaans and Hindi and spoken by 86.5%[11] of the population, but is not an official declared language. Furthermore French is taught in the schools and

[5] Wikipedia | Mauritian of African origin
[6] Wikipedia | History of Mauritius
[7] Wikipedia | Mauritian of Indian origin
[8] Wikipedia | Mauritian of Chinese origin
[9] Wikipedia | Mauritian of Chinese origin
[10] CIA, World Fact Book | Mauritius, People & Society, Languages
[11] CIA, World Fact Book | Mauritius, People & Society, Languages

is spoken by 4.1%[12] of the population, but other courses are officially 'on the paper' taught in English.[13]

EDUCATION

The Mauritian society is of welfare standards and therefore education is generally free of charge, but as in Denmark, private primary and secondary schools exist in Mauritius. Also there are colleges separated by gender, boys/girls colleges.[14] The education system is build upon the standards of Cambridge. University of Mauritius (UoM) are free of charge, but in Mauritius they also have private universities. All students from the public university have free transportation, while books and appliances are self-paid. In fact the private universities' education ranking is lower than the once of the public university. In the Mauritian host family where I stayed, we often talked about education, work situation of the general population of Mauritius and many other things. The mother of the family, who is 54 years old, told that after she finished secondary school, she never had any further education, because her mother did not have enough money to send all eight children to college, so the host-mom worked at home, which meant taking care of her siblings and helping out with the household. Therefore, she cannot speak English, but with my presence she slowly learned some words of English. Both girls from the host-family have college degrees; only one of the girls has a job as a supervisor in a shop within a shopping mall. The other one is currently working at home, helping out with the daily household jobs, due to the fact that her hopefully, soon to be husband does not like her to have a job.[15]

[12] CIA, World Fact Book [1] | Mauritius, People & Society, Languages
[13] UNESCO | Mauritius, World Data on Education, 2006/07, p. 3
[14] Wikipedia | List of Secondary Schools in Mauritius
[15] Remembered conversation with family | 15/08/2016

As mentioned in the paragraph above, less than 1% of the population speaks English and it is therefore quite common for the elder generation that they are not capable of speaking English, (though they might be capable of understand some English), the exception being elderly of an upper class family and/or are working a tourism related job. The local doctor of the village I lived in told that a lot of the elder patients with diabetes simply do not know how to take their medication, also they might not know English very well, and a lot of the medicine descriptions will come in English, and some cannot read due to their sparse education. This will lead to a lot of misreading and misunderstandings, which could lead to further problems for the diabetes patient. [16] The problem of sparse education will be accounted for more thorough later on in the chapter on Health Literacy.

ECONOMY

The Mauritian economy is in rapid development, and the island is one of the wealthiest countries on the African continent. The GDP of Mauritius is $24.57 billion, with a yearly growth rate of an average of 3,4% the past three years, and the island economy is classified as an upper-middle income economy.[17] Thus the gini-index of the island is rather small, 35,9%, this could also, as noted in the dictionary that the country only consist of poor people, it is important to take this into account. A Gini-index accounts for the percentage of the maximal spreading of the income in a country.[18] The different industries of the island is as following; food processing (largely sugar milling), textiles, clothing, mining, chemicals, metal products, transport equipment, nonelectrical machinery and tourism. Of agricultural production, following is being produced on the

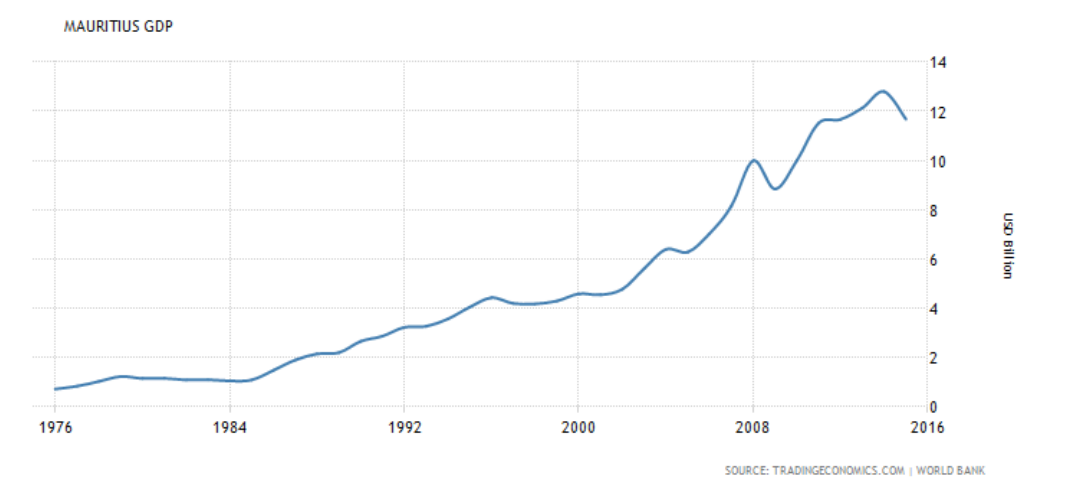
[16] Remembered conversation with local doctor | 25/11/2016
[17] CIA, World Fact Book | Mauritius, Economy, Economy - overview
[18] Den Store Danske | Gini-index/gini-koefficient

island; sugarcane, tea, corn, potatoes, bananas, pulses; cattle, goats; fish. The island exports clothing and textiles, sugar, cut flowers, molasses, fish, and primates (for research).[19] Manufactured goods, capital equipment, foodstuffs, petroleum products and chemicals are imported whilst the island have various of products they are not capable of producing, and due to the quite isolated position of the island.[20]

THE RAPIDLY CHANGING ECONOMY

The Mauritian economy is in rapid change. Newspapers report in different articles various stories on the "booming economy"[21] of Mauritius or Mauritian economy as "the most competitive in sub Saharan Africa"[22]. In professor Marie France Lan Cheong Wah's paper of 2010, she stresses that "[t]here has been a major change in the lifestyle of the population, mainly due to the rapid economic development of the country in the 1980's."[23] Let us separate this statement into two: first the rapid economic development of the Mauritian economy. Statistics show that the Mauritian economy has been of drastic upward character for the past 17 years, as seen in the charter below, which is borrowed from the trading economics world bank.

[19] CIA, World Fact Book | Mauritius, Economy
[20] CIA, World Fact Book | ?????
[21] CNN | Inside Mauritius: The tropical paradise with booming economy
[22] africanews.com | Mauritian economy ranked 'most competitive' in sub Saharan African
[23] Sun, M. C., 2010, p. 2



Figur 1 - Mauritian Economy [24]

The newspaper article 'Inside Mauritius: The tropical paradise with a booming economy' points out that the Mauritian economy are competing well due to their diversifying management of the economy: "lately the country has begun setting its sights on exporting jewelry and watch components."[25], but that the economy also rely on the well established sugar cane production, which has given the island a stable economic foundation.[26]

When an economy is booming, more money will also be distributed to the consumers. This will mean that the average Mauritian will face an increase in their income and therefore have more money in their disposition. When looking deeper into the income distribution of Mauritians the fact that the economic boom will and have increased the average Mauritian family's household disposable income can be seen. A statistic made by Statistics Mauritius show that the "[a]verage monthly household disposable income [has] increased by 53.9% from Rs 19,080 in 2006/07 to Rs 29,360 in 2012. After adjusting for inflation and decrease in household size […], the real increase worked out

[24] Figur 1: https://tradingeconomics.com/mauritius/gdp
[25] CNN | Inside Mauritius: The tropical paradise with booming economy
[26] CNN | Inside Mauritius: The tropical paradise with booming economy

to 22.3%"[27]. Comparing the Mauritian rupee currency to US Dollar, 100 MUR is equivalent to 2.87 USD.[28] And second, in the citing from professor Cheong Wah above, she stresses that the rapid change of economy is leading to major changes of the lifestyle of the Mauritian people, she continues with:

> "[…] traditional ways of life in Mauritius have shifted to a western lifestyle with an increased consumption of carbohydrate-rich, high-calorie ready-made fast foods. This nutritional transition is leading the population to consume increased amounts of fat, sugar and salt in the diet along with reduced amounts of fibre in processed foods."[29]

It can therefore be argued, that the increased amount of monthly household disposable income has a direct influence on the Mauritians lifestyle, which is still leading them towards a more western lifestyle. This have according to Cheong Wah's finding had a direct impact on the prevalence of overweight and obesity, and when the prevalence of overweight and obesity increases, the risk of Impaired Glucose Tolerance and Type 2 diabetes increases as well.[30]

[27] Statistics Mauritius | Household Budget Survey 2012
[28] XE.com | Currency Converter, live mid-market rate 2017-05-31 UTC
[29] Sun, M.C., 2010, pp. 2-3
[30] Sun, M.C., 2010, p. 3

DIABETES MELLITUS

The name Diabetes Mellitus derives from the ancient Greek. Diabetes means *excessive discharge of urine* while mellitus means *honey-sweet*. In the old days the typical treatment was an order of complete fast, which meant that people either died from starving or chose to live with diabetes and the problems following the disease.[31] Today 422 million people in the world have Diabetes either type 1, 2 or GDM (Gestational Diabetes) and 1.5 million people die from diabetes every year.[32]

> "Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose (or blood sugar), which leads over time to serious damage to the heart, blood vessels, eyes, kidneys, and nerves. The most common is type 2 diabetes, usually in adults, which occurs when the body becomes resistant to insulin or doesn't make enough insulin. In the past three decades the prevalence of type 2 diabetes has risen dramatically in countries of all income levels. Type 1 diabetes, once known as juvenile diabetes or insulin-dependent diabetes, is a chronic condition in which the pancreas produces little or no insulin by itself."[33]

[31] Wikipedia | History of diabetes
[32] WHO | Diabetes
[33] WHO | Diabetes

WHAT IS TYPE 2 DIABETES MELLITUS?

When talking about diabetes it is important to separate the two kinds of diabetes from each other. As mentioned above, Diabetes Type 1 is a genetic disease, where on the contrary diabetes T2 is a lifestyle and a hereditary disease. The chances of developing diabetes T2 when one or both of your parents have it, is higher than if none of your parents had it and the mal-lifestyle condition of the disease was fulfilled. This means that you are able to develop diabetes T2 from having "[…] a lifestyle with liberally amounts of food and a sedentary job, which is a source to making the illness break out."[34] The Danish Diabetes Association points out that the mal-lifestyle is not aimed at one single person, but that our society in general is in a problematic state of living. You do not have to be overweight to increase your risk of getting diabetes T2. The Danish Diabetes Association (*Diabetes Foreningen*) reports that 10-20% of the Danish diabetes T2 patients are of normal weight.

A form of diabetes not described in the above is Gestational Diabetes, which is a form of diabetes that occurs during pregnancy and have a big influence on both mother and child.[35]

It is to argue on the numbers brought by The World Health Organisation (henceforward referred to as WHO) and the International Diabetes Federation (from now IDF), that Diabetes Mellitus is a world wide rising problem. Both organisations stresses, that by 2040 this number will have increased by 227 million, which means that the number of adults with Diabetes will be 642 million.[36] Patients are diagnosed on basis of WHO

[34] Diabetes Foreningen | Type 2 Diabetes guidance pamphlet, retrieved 20/03/2017
[35] IDF | About Diabetes
[36] IDF Diabetes Atlas, p. 50

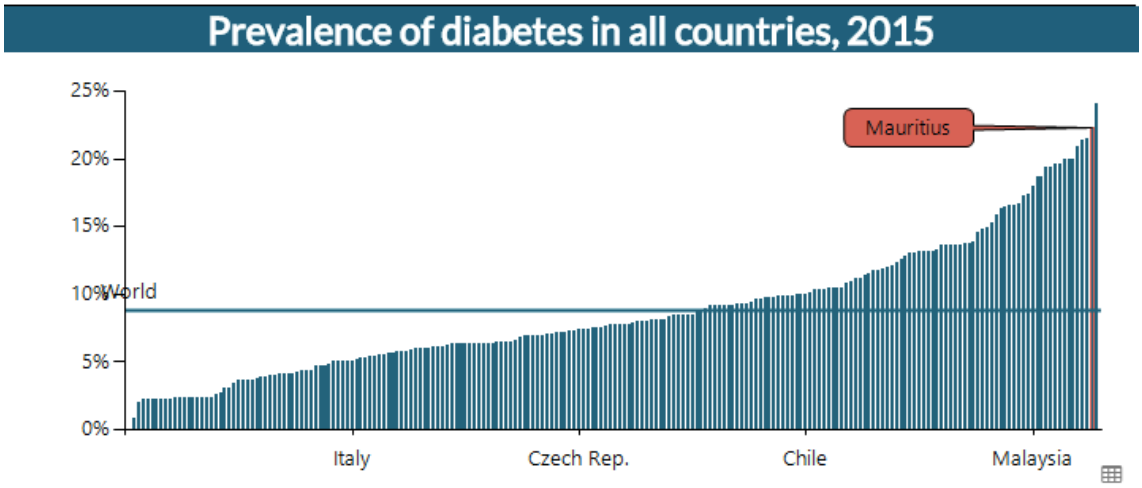
standardised criterions of normal levels of glucose in the blood.[37] In the next section I will first account for only Diabetes Type 2 (from now diabetes T2) and the ones in the risk of obtaining diabetes T2.

When it comes to diabetes, Mauritius is one of the top five countries in the world with the highest prevalence of diabetes. This I will account for in the next chapter.

[37] Report of a WHO/IDF Consultation, 2006

THE PREVALENCE OF DIABETES IN MAURITIUS

One of the top five countries in the world to represent the current highest prevalence of diabetes is Mauritius, where 22,3% of the population is diagnosed with diabetes. It is also estimated by IDF that 51,4% of adults in Mauritius are having undiagnosed diabetes.[38] These numbers are high compared to the average percentage of diabetes on a world basis.



Figur 2 IDF Country Report 2015, Mauritius

As shown in the chart above "[…] Mauritius is one of the countries in the world with the highest prevalence of Type 2 Diabetes mellitus […]"[39], as it is also stressed in a review article by professor Cheong Wah and she continues with: "There is thus need for effective preventive policies."[40]

[38] IDF | IDF Atlas 7th Edt., Country Report, Mauritius
[39] Chan Sun, M. F., 2012, p. 317
[40] Chan Sun, M. F., 2012, p. 317

NON-GOVERNMENTAL ORGANISATIONS

Non-Governmental Organisations, henceforward NGOs, are organisations that are independent of any kind of governmental control and:

> "[…] not seeking to challenge governments either as a political party or by a narrow focus on human rights, not for profit, and noncriminal."[41]

The NGOs in Mauritius can apply for funding from the government, but will still operate independently from the government. Also national NGOs in Mauritius are supported by 1% of a private companies' yearly profit each year. It is, thus with the government's acceptance, the companies who chooses which NGO is benefitting from the 1% of their yearly profit. Another 1% of each private company's yearly profit will be distributed by the government to cover issues of social character like poverty, handicap resources etc.[42]

In the later I will account for two of the national NGO's in Mauritius whom are fighting against diabetes through prevention programmes, education of diabetics and education of diabetic children and their parents. These are the two organisations interviewed during fieldwork, while these were accessible through the cooperating professor Cheong Wah.

T1 DIAMS

T1Diams is another organisation working primarily with Diabetes Mellitus Type 1 (T1DM) in Mauritius. The organisation was founded in September 2005 and the name

[41] Willets, P., 2010, pp. 25 & 26
[42] Interview | diase, Diabetes Safeguard, 13/12/2016

came from the mix of T1DM and 'diamond', referring to children with T1DM as diamonds that need to be treated as so (diamonds).[43] Its' mission is to educate both adults and children with Type 1 Diabetes, but originally their focus were children with Diabetes Type 1, thus their experience resulted in educating parents of diabetic children and the child in how to administrate a life with Diabetes or a life with a diabetic child.[44] Later it came to the education of adults and adolescents with T1DM. Now they are also helping T2DM patients, but it is not their main expertise. They strive to give Diabetes Type 1 patients a better life with fewer risks coursed by their incapability to control their insulin intake compared to their activities or food consumption.[45]

SAFEGUARD

Safeguard is an organisation working with the prevention of the prevalence of Diabetes Type 2, on their webpage they describe their story of fighting diabetes:

> "For almost ten years now, we have been battling on the fields, starting with children with type 1 diabetes, moving onto children with type 2 diabetes and now also adults."[46]

In the SafeGuard organisation, their mission is to give both children and adolescents good habits, and by that a healthy lifestyle build on healthy choices. This is expressed on their website by the wording:

> "How about introducing Food education in the school curriculum, right from pre primary school? To give every child

[43] t1 diams, Historique
[44] t1 diams, Vision et Objectifs
[45] Reference til interview i T1 Diams
[46] Diase | Diabetes Safeguard, Story About Us

> the knowledge they need to grow up making healthier decisions that will have a long-term impact on their lives."[47]

Mrs Rani Balloo is the president of the organisation. She is an educated nurse and had her 15 years of experienced nurse in hospitals before she started up Diase, Diabetes Safeguard in Mauritius.[48]

> "We already have 10 diabetes centres in operation, we started calling them microclinics, now we changed the name. We want to open 10 new diabetes prevention centres […]." [0:05.40][49]

She is starting up many different programmes to help out children and adolescents in any possible way. These are programmes concerning either better habits of exercising or better food habits, which comes along with the exercise programmes. The current count of implemented programmes is 16 and still counting. Some of these programmes have already been terminated, like "Diabetes Camp 2011"[50], but most of the programmes are on going.

The main focus of current thesis will be on the work conducted by diase, Diabetes Safeguard, while they are the NGO of the two within this project, that conducts prevention oriented programmes.

[47] Diase | Diabetes Safeguard, Story About Us
[48] Indsæt reference til interview med Rani Balloo
[49] Interview | diase, Diabetes Safeguard, 13/12/2016
[50] Diase | Diabetes Safeguard, Projects

PROBLEM STATEMENT

Based on the findings within the problem analysis above, that the rapidly changing economy has a direct impact on the health of Mauritians due to a change of lifestyle to a more western lifestyle, and their genetic issues on higher glucose intolerance what I find relevant to research deeper into is:

> How can increased technology-assisted prevention of diabetes in Mauritius reduce the number of pre- and diabetics?

Furthermore this thesis will research and strive to answer following research question:

1. Which Cultural Health Literacies are having an effect on the prevention of Diabetes T2 in Mauritius?

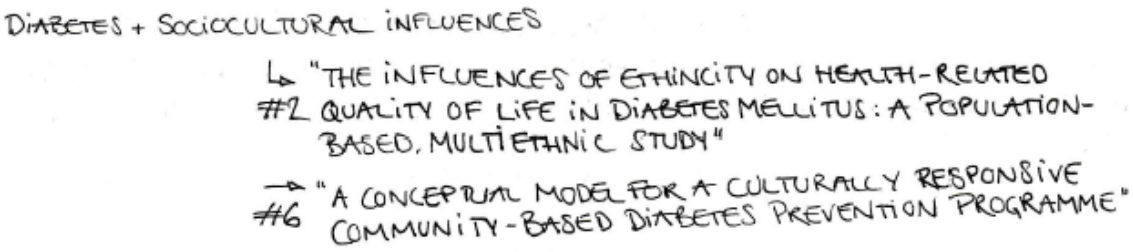
First it is important to address the meaning of technology within this thesis, is that of a Techno-Anthropological approach where technology is seen as both procedures and artefacts with reference to the figure in the chapter of the methodology of current project.

METHOD

In this chapter I will account for the different methods I have been using in the process of conducting my thesis. First I will account for how I conducted the article review, which databases I used and explain why I used these specific databases. Also I will account for the process of choosing and sorting the different articles, so that I had a close grip on the many articles. Later I will account for the different methods of the field studies in the process of generating empirical data. First I will describe the anthropological methods used during fieldwork, which will be followed by the techno-anthropological methods and ways of thinking, that I have taken into account during my field studies. This will complete my joint method of the thesis.

METHOD OF LITERATURE REVIEW

I started with conducting a search for articles focusing on only the medical part of my study, so that I had some more specific knowledge about Diabetes Mellitus both type 1 and type 2. In this search I sorted out the most interesting and most relevant headlines. To be sure not to hit the same articles on the different databases, I wrote down all the titles of the different articles, by hand.



Figur 3 Writing down titles

I chose 22 articles and copied the abstracts and the headlines into a word document and gave all the headlines numbers so that I had a short cut for later, and could just refer to #1 or #7 instead of the exact title. I made an Excel file with each database and numbers on the articles, to get an overview of my search. I started reading through the abstracts of the articles. Whenever I found new words, which had any correlation to my problem area I would write them down in the Excel document for further search on articles.

Nr.	Scopus	Results	New words
1	Diabetes AND Cultural Factors AND Treatment	#7, #14, #17, #22, #24	"Interventions",
2	Health Perceptions AND Diabetes	#1, #4, #5, #9, #9, #15,	"Socioeconomic",
3	(TITLE-ABS-KEY (**health perceptions**) AND TITLE-ABS-KEY (**diabetes**)) AND (LIMIT-TO (SUBJAREA , **"SOCI"**))	#1 (Same as #5^), #3, #5, #8, #14, #15, #18, #19, #20, #24, #25, #26, #28, #34, #35, #39, #45,	"Health beliefs"

Figur 4 Excel overview of searches conducted

I would write down notes to the abstracts to get an overview of the content of the articles. These articles made a foundation for my upcoming field work, so that I knew some of the problems in terms of Diabetes treatment and the prevention of diabetes, and could direct the questions towards some of the issues.

Before starting the search for already conducted studies of the prevention of Diabetes Type 2, I tried to redefine and specify my problem statement, so that the output for the article review could be so specific as possible. In account to my problem statement: "How can the increase in number of diabetics in Mauritius be prevented?"

I started searching on words as: Health Literacy AND Prevention, increasing slowly with more precise wordings, as when I scrolled down the first 10 articles, I could see what kinds of hits I would get, and therefore how I would be able to increase and specify the research. I would note down whenever I met new words that made sense to my problem statement and research questions, to further develop and increase the search as shown in the picture above. On all my searches I limited the search to be on only *articles* (search criteria) and only articles in English, to increase the number of hits, which made it more manageable to search through.

DATABASES RESEARCHED

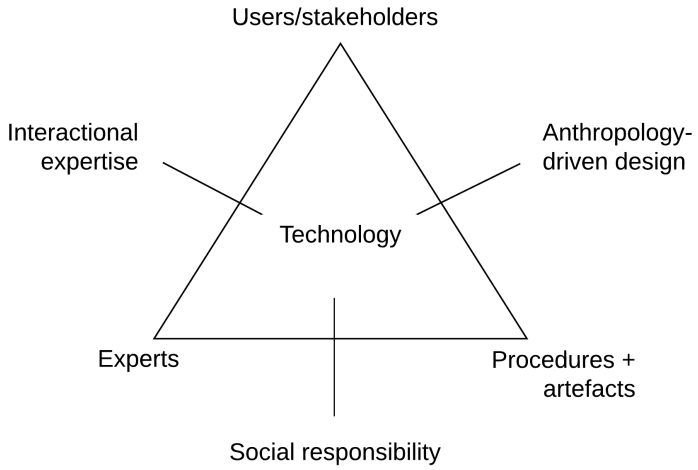
I started out with searching on very specific databases, while I wanted something that was somewhat cross courses, so that I got articles from correlated fields, like the medical and the anthropological field. After making my project less divergent, and specifying the words within the aspects of the focus of the project, it was possible to conduct the literature study at the overall AUB (Aalborg University Bibliotek) . All the databases that I have search on are intercultural. Due to the multi-field inclined focus of my project I decided to do my literature studies on the following multi-field inclined databases, which was advised by the university librarian:

- AUB (Aalborg University Library) – Access to all databases available from Aalborg University
- Ebsco
- Google Scholar
- ProQuest
- Scopus

FIELD WORK METHODOLOGY

TECHNO-ANTHROPOLOGICAL METHOD

Techno-Anthropology is a holistic methodological and theoretical approach for the techno-anthropologist to be able to fit into this hybrid position of building bridges between the users, experts and the technology (either instrumental methods or artefacts). "The interactional expert tries to combine and bridge the reality of the user with that of the expert in order to provoke change on both banks"[51], this is what the triangle of techno-anthropology symbolises, the hybrid methodology of a techno-anthropologist.



Figur 5 The Techno-Anthropological Approach

Furthermore L. Botin offers this citing for understanding the holistic methodology of Techno-Anthropology:

> "In understanding this dynamic position and meaning of problems we find that in order to learn we have to take a multiple, simultaneous and inter-disciplinary perspective where cultural studies have en equal importance to social and scientific

[51] Børsen, T. & Botin, L., 2013, p. 68-69

> studies. This is a core competence and quality in Techno-Anthropology."[52]

It can therefore be said that Techno-Anthropology strives to bring experts, users and technology closer together, by being the medium translating the symbolic order of the three corners of the triangle, by the methods offered in-between these corners.
This is the reason why a Techno-Anthropological approach was chosen for this project. The social responsibility lies within the fact that diabetes is a commune problem of which the institutions of society e.g. that of the government in policymaking, or NGO's in their education of diabetes patients, should support and offer their part of the commune responsibility. In this relation the technology would be that of the instrumental type, where policies or education healthy lifestyle acts as a technology to decrease the problems of current subject. The anthropology driven design lies within the Techno-Anthropologists work of understanding the 'users' of these policies or educational options before they are actually designed – designed to fit. This field minimise and decrease the problems within the policies or the problems of healthy lifestyle choices for the users. The last in-between is the duty of the Techno-Anthropologist, being the medium, the one who understands the three actors within the problem, while helping them communicate through the understanding of the other. This is where the 'medium' acts.
With the focus of the project being on the technologies of diabetes and technologies of diabetes prevention while generating data, the method for generating data that lead me to understand the users and experts, was through a qualitative method - the anthropological approach. This I will account for in the next section.

[52] Børsen, T. & Botin, L. 2013, p. 76

Qualitative Method

Auto-Ethnography

Data of current thesis has been generated through an autoethnographic approach. This means that I will often account for own experiences within the field due to my state of immersion (partially a member of the field) where I moved in and out of context of the field while I was living in the field as a part of it and at the same time working within the field as a Techno-Anthropologist.[53]

In Atkinson, Coffey and Delamonts' article, Powdermaker is being referred to for describing an anthropologist in at state of immersion would be:

> "One who joins in but remains apart; has personal experience
> and feelings of the field, but does not become part of that field;
> is there but not there; engaged but distant."[54]

Therefore observations written down in my personal diary[55] is also a part of the collection of data analysed, and therefore it is important to state that I am aware of the personal point of view within this thesis, and that this method and way of writing derives from the autoethnographic approach.

Immersion – Position within the field

In addition to the terms of immersion it is also important to state that while being partially a part of a society you are also partially not a part of a society. [56]This state of

[53] Denshire, S., 2014, p. 832
[54] Atkinson, P., Coffey, A. & Delamont, S. 2003, p. 50
[55] Cullen, J. G., 2011, p. 148
[56] Atkinson, P., Coffey, A. & Delamont, S. 2003, p. 50

immersion was a part of my experience, especially the 'not part of the society'. I had already spend 1,5 month at their place the year before conducting my fieldwork for my thesis. I was told that they saw me as a daughter of the family, and that I at anytime could come back and visit them. It was with tears from both sides I left Mauritius the first time. When I came back I was to stay in Mauritius for 10,5 months conducting my fieldwork. I was warmly welcomed by the host-family and everything seemed so fantastic. But what I did not know was that the family saw me as a resource of money, they would lie to me to try and gain more money from my stay at their place. When it came to my knowledge that they had been lying to me, I had to break with the family relation to get out of this extreme situation of immersion. Due to this situation, I decided to break my fieldwork before the 10,5 months came to an end. I left Mauritius after 6,5 months spend conducting fieldwork.

Bias

While I had already conducted research in Mauritius before, I had a lot of knowledge of the different cultural aspects of the society, the food, the religions, the language, and many other things that forms the Mauritian society. Here the term culture is that defined in Hylland-Eriksen's 'What is anthropology?' where he cites EB Taylor:

> "Culture or Civilization, taken in its widest ethnographic sense,
> is that complex whole which includes knowledge, belief, art,
> morals, custom, and any other capabilities and habits acquired
> by man as a member of society"[57]

[57] Hylland-Eriksen, T. 2004, p. 26

But of course there were a lot of things that I did not know of. Before going into the field once again, I tried to define my bias to the field, so that I was aware that some things I might take forgiven when acting within the field during fieldwork the second time.

NETWORKING

In the beginning it was very important for me to create relations to Mauritian people who would be able to help me in different ways with my project. I had the idea that if I had a lot of good relations it would be easier to 'sneak' my way into the health sector, while it is very difficult to get a research permit in Mauritius. Therefore I needed to work from bottom of the system and up. This is something that takes quite a lot of conduit, while the Mauritian government are very thorough with keeping an eye on the ones travelling into the country, and making sure not many different information about the government leeks.

Every time I went out and met people, I made sure to get their names and numbers, and it is very normal to have a visit card in Mauritius - lucky me. Very often I came across someone with some kind of relation to diabetes. Of course you can say, that when a society counts 24 % of diabetics, quite a lot of people know someone with diabetes. And of course I believe that this is the case with the people I met.

Working in such a small society as Mauritius, it seems a lot easier to get close to important people. In terms I mean people important for my project. One of the days in Mauritius I was searching for articles with relations to my project, to increase my knowledge within the field of Mauritian diabetes treatment and prevention. While searching I found that a Mauritian researcher and professor, living and researching in Mauritius working at the University of Mauritius (UoM from now on), was doing

research on diabetes in Mauritius. I decided to contact her, thus I did not expect any kind of email back, while I did not know how the hierarchy between students and professors in Mauritius. She replied kindly that she of course wanted to help me as much as possible, so she asked me for a meeting. I met with her at her office at the UoM, as we agreed, and she asked me about my project and how she could help me out.

INTERVIEWING

[58]When interviewing stakeholders it was essential being able to record the conversations, while it was not efficient to write down notes while listening. Therefore stakeholders and other important interviewees were asked permission to be recorded during the interviews. Also the interviewees were asked if they wanted to be anonymous, but in none of the interviews this was a wish by the interviewees. The remembered interview is a part of the participant observation method. While participating in either rituals or events it can be difficult taking down notes without seeming to not be participating in events. These interviews are of normal conversation character, this means that the interviewee will not see this as an interview, and while it is of more informal character, it might be easier for the interviewee to talk to the anthropologist, in this case the techno-anthropologist, and information will therefore be passed more easily.

Whenever I went somewhere to meet new people or to research different structures within the health system (doctors, welfare centres etc.), I either took a couple of notes while speaking with the people with whom I spoke to, or waited until after I left the premises, while it might seem a bit overwhelming to some people to take notes while speaking with them. If the conversation was with the host-family, notes would be

[58] Hammersley, M. & Atkinson, P. 2007, p. 117-119

completed either the same night before bed or the next morning, if conversations were late.

Most of the interviews conducted during fieldwork with important stakeholders and informants was of a semi-structured character, while this method often gives more information, when the ones interviewed are able to speak freely on the different subjects put forward by the interviewer. While the stakeholders already had a great interest in the subject of this project, they tended to have their own agenda that they wanted to bring to the fore while being interviewed. They wanted to tell about all the good programs they had started or the campaigns currently running to prevent diabetes. Also they tended to get their saying on the other NGO's and their programs. Another hot topic for all stakeholders was the political aspects within the fight against diabetes.

Field Notes

Depending on the different situations of fieldwork, I chose to do my field notes quite differently from time to time. Whenever I was having conversations with members of the host-family, and the subject was something of importance for my thesis, full notes would written in the evening, as remembered interviews and observations, due to the (of my opinion) invasive presence of a notebook and a pen.[59] I thought that the host-family might see them selves as being watched if I was writing down while talking to them in a 'family matter'. When I was out interviewing I would make jotting notes during the interviews, thus I recorded the interviews. This way I could note down facial expression and other things that you are unable to hear in a recorded interview.[60] Also I would note down important parts from the interview, to make sure that I remembered these parts

[59] Emerson, R. M., Fretz, R. I. & Shaw, L. L. 2011, p. 45
[60] Emerson, R. M., Fretz, R. I. & Shaw, L. L. 2011, p. 29

especially well. Sometimes my jottings would be written out a bit more, during transportation from one location to another, but most times jotting was completed into fullnotes in the evening. This way of keeping track of both observations and interviews keeps events fresh in mind and also makes it a lot easier to code notes later on.

LITERATURE REVIEW

In the beginning of the fieldwork, a search on relevant articles for the project was conducted. The point of this literature study was at first, to gain knowledge upon the topic of diabetes. The subject is a large field to engage with and the aspects are many. Therefore it was found crucial to know of the terms within the field of diabetes, to understand the informants better. Secondly the search was conducted to make a more convergent fieldwork in terms of specifying the research to a subject within the field of diabetes, thus, this literature study did not converge my fieldwork nor my data, my focus within extracting and working with my data led me on to the subject of diabetes prevention. Another literature study was conducted after processing the data from my fieldwork. Here the search was conducted on more specific subjects that related to the findings from the generated data. The article found in that literature study is also accounted for in this chapter.

Diabetes is a wide field and that the aspects of this subject are endless. This became clear during the first article search. First there is the difference between Diabetes Mellitus Type 1 and 2, and they are different in many aspects, yet the lifestyles of individuals in each group should be the same. Also both groups are well represented in Mauritius. In an article Guness Pravesh and Marie Chan Sun accounts for the problem of economic character in the private sector of Mauritius to treat diabetes type 1. The cost of insulin, test strips, glucometer and syrings, is too expensive and therefore any patients diagnosed with diabetes type 1 is referred to the hospitals, where the treatment is free.[61] Second, an article on how people in Mauritius tended to use *Native Remedies*

[61] Pravesh, G. & Chan Sun, M. 2013

to treat their diabetes was found. The native remedies would vary from plants and polyherbal formulations to animals. The research were conducted in terms of mapping which native remedies were the most popular to use and to put forward the widespread use of these native remedies by the Mauritians.[62] In another article also conducted by Mahomoodally and Mootoosamy together with Wambugu, (from a research conducted in 2016 two years later than the first) they yet again discuss sociocultural factors in relation to treatment of diabetes in Mauritius. In this research they focus on the relation between religion and traditional therapies to treat diabetes and diabetes complications. The research is, as described conducted to gather knowledge on the various traditional therapies, of the different religious groups within the Mauritian society. They found that there is yet no scientific proves of the safety neither of the pharmacological effectiveness of these native remedies or traditional treatments.[63] In six of the articles diabetes was put into relation with ethnic groups. In two of the articles, ethnicity[64] and/or gender, cultural differences were researched in relation to diabetes. In one of these articles minorities' (Asians in England)[65] food choices were analysed compared to that of native Englishmen. This article was chosen to compare other Asian groups outside Mauritius to the Mauritian Asian population's standards of food choices, and impact of diabetes prevalence. Concerning nutrition, articles of adolescents' food habits and the influence of home economics at schools in Mauritius, two articles seemed relevant. The first article by Oogarah-Pratap, B., et al., concerned as just mentioned, the influence of home economics, a course in Mauritian schools, on nutrition knowledge and food skills. This article stresses that there seemed to be no significant difference in

[62] Mootoosamy, A., & Fawzi Mahomoodally, M. 2014, p.
[63] Mahomoodally, M. F., Mootoosamy, A., & Wambugu, S. 2016.
[64] Wee, H. L. et al. 2006
[65] Sheikh, N. & Thomas, J. 1994

nutritional knowledge between those students who was taught Home Economics and those students who did not attend this course.[66] It needs to be mentioned that Home Economic is not a compulsory course and Oogarah-Pratap, B., et al. advocates that it thus should be together with active learning. Another article by Oogarah-Pratap, B. takes former studies of adolescents dietary habits into account, and he stresses that adolescents tends to eat food that is high in fat and sugar, and low in fibre. This article also stresses that there is no improvement in lifestyle concerning intake of vegetables and fruits since 1988.[67] This conclusion on unhealthy food choices is also addressed later in this literature review. Two articles concerned the intake of fruit among ethnic groups in Mauritius. One of them describes how vegetables and fruit intake are depending on socio-demographic factors as education and ethnicity[68], the other on the patterns of the fruit intake of the Mauritian.[69] The first article concerning fruit intake in Mauritius, stressed that when socio-demographic factors are hold against BMI measurements, is seems that there is a correlation between e.g. education, ethnicity and the BMI.[70] The other article on fruit intake in Mauritius concerns when during the day fruit is consumed and how much fruit Mauritians consume. This article stresses that the low intake and the frequency of fruit intake was affected by economic factors and concludes that "[i]n view of the potential health benefits from a high consumption of fruits, population groups with low consumption of fruits may be at a health disadvantage."[71]

[66] Oogarah-Pratap, B., et al. 2004., p. 265
[67] Oogarah-Pratap, B., 2007., p. 447
[68] Badurally Adam, B. T., et al. 2012.
[69] Subratty, A. H., & Jowaheer, V. 2001
[70] Badurally Adam, B. T., et al. 2012., p. 228
[71] Subratty, A. H., & Jowaheer, V. 2001., p. 127

In 1991 a research on the physical activity among the different ethnic groups in Mauritius was conducted. It was found that "[…] their occupational activity was the major contributor to the combined physical activity score. More males than females engaged in moderate to heavy activity both in their occupation and in their leisure time. Chinese males and Muslim and Creole females were the least active."[72] Thus this article is rather old, its' findings are still important to take into account, while the society of Mauritius is so divergent in a cultural and ethnic term.

While the articles above strive to analyse the differences in ethnicity or other stigmatising factors S. Söderberg et al. concludes in their article that Diabetes Mellitus Type 2 is a rising problem within all ethnic groups of Mauritius. This means that the problem of the high prevalence cannot be that of the different ethnic groups or genetic differences (thus there genetic impacts on impaired glucose tolerance within the Indo-Mauritians), but that of the Mauritian lifestyle, which influences the incidence of Diabetes Mellitus Type 2 in Mauritius.[73]

[72] Zimmet, P. Z., et al. 1991, p. 865
[73] Söderberg, S., et al. 2005

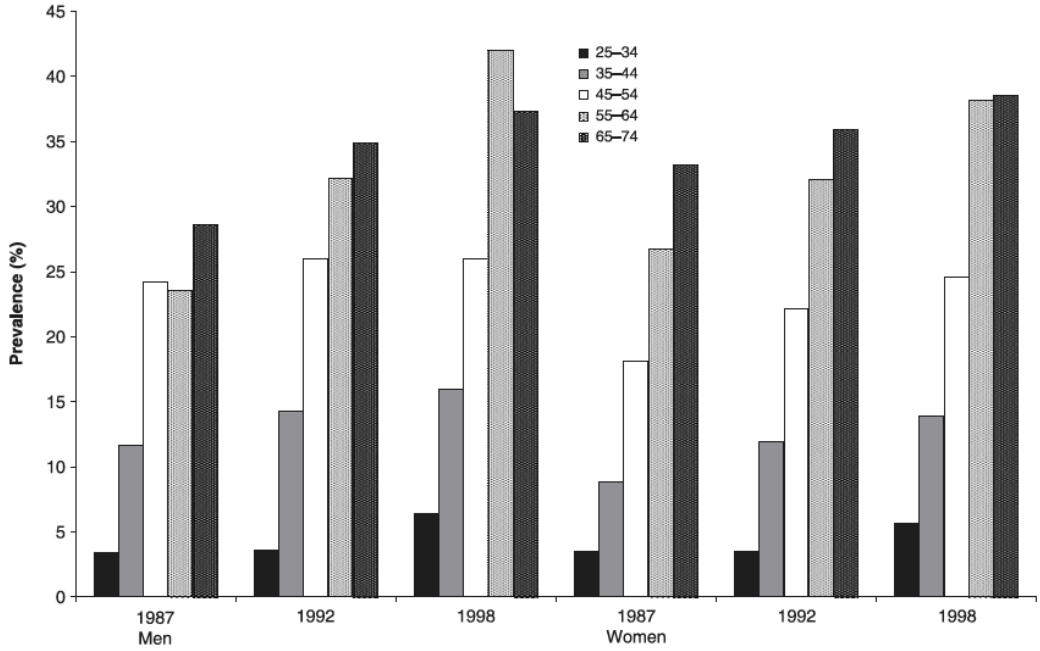


Figure 1 Crude prevalence of diabetes mellitus stratified for age group (years), survey and sex.

Figur 6 Söderberg, S. et al. 2005

In relation to this article, a Mauritian professor addresses in her article, that the reason for the rising incidence of diabetes is that of the rapidly changing economy of Mauritius. She stresses that it is important to look into the changing lifestyle, which comes along with the rapid economy, and the western influence, and that the current awareness programmes of healthy lifestyle or education of a healthy lifestyle has been too isolated and she further advocates for more intensive awareness programmes.[74] Thus ethnicities in Mauritius have an equal prevalence of diabetes it is still to advocate that cultural differences among the groups needs to be taken into account in the matter of diabetes prevention or health education. This is a subject discussed in the article 'Cultural models, gender and individual adjustment to Type 2 Diabetes in a Mexican Community', advocates for the crucial importance of emphasising cultural factors in the understanding of the individuals and the society's diabetes literacy. The article analysed how different the perception of diabetes as an illness were understood by 46 informants

[74] Chan Sun, M. 2010

along with the perception of the diabetes treatment.[75] This argument is being supported in the review article, written by Rawal et al., on how to specify or make prevention programmes better or what the current or past prevention programmes have been missing, is here discussed. In this review article, they suggest, that the prevention programmes in developing countries which they have been looking into, seemed to miss some different aspects, which the western countries programmes seemed to contain. Here they suggest that the western prevention programmes' culture and religion specified design might have been more efficient, while people do not think alike due to their background. Their conclusion is that prevention needs to be specified to be effective and 'aggressive'.[76] Supportively an article by L. Perreault & K. Færch they research the perspectives within pre-diabetes, that of the reversing of pre-diabetes and that of the delaying of diabetes. They advocate that it is possible to revers diabetes and pre-diabetes, but that it needs proper interventions, and that previous interventions and programs seem to have lost their effectiveness post-intervention.[77]

Another aspect of diabetes and impaired glucose tolerance is the association between these and cancer mortality. This is described as a first research on this subject in South East Asia, and the research was conducted in Mauritius. Here it was found that often men with impaired glucose tolerance had a higher risk of cancer mortality than women.[78]

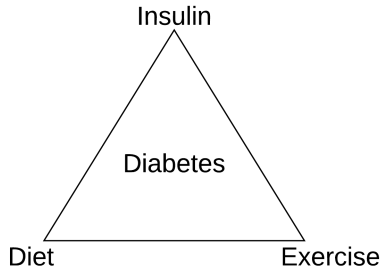
With these aspects as foundation to the understanding of diabetes and diabetes in Mauritius it can be argued that Mauritius needs improvement in education on a healthy lifestyle and food choices already in secondary schools, to improve their

[75] Daniulaityte, R. 2002
[76] Rawal, L. B., 2011
[77] Perreault, L., & Færch, K. 2014
[78] Harding, J. L., et al. 2012

knowledge upon health, while adolescents as described above have a tendency to choose high fat, sugary foods and snacks. And while they are the future of Mauritius it could be argued that education of adolescents in health would be a step towards pre-primary diabetes prevention. Furthermore it is argued in some of the articles of this review, that it is important to take into account, the various cultures and backgrounds when designing prevention programmes and interventions. Thus many of the articles strikes the education of diabetes patients and pre-diabetes patients alongside with educating adolescents of the importance of a healthy lifestyle, and that being of great importance in the prevention of diabetes, none of the articles reviewed have taken *health literacy* into account. Also, none of the articles concerns technology assisted prevention of diabetes and what impact technology can have in the prevention of pre-diabetes and diabetes type 2. Therefore this will be the focus of current thesis.

THE THREE HEADLINES OF DIABETES

In this chapter data will be deducted and analysed through the three headlines of diabetes. The three headlines for this chapter derive from the concept of the diabetes triangle made by Elliott Proctor Joslin. The triangle serves as a visual way of showing a diabetic how to control and balance diet, exercise and insulin when you are a diabetic.[79]



Figur 7 Joslin's Treatment Triangle

The triangle shows the way to ideal balance everyday in a life with diabetes how diet, exercise and insulin are intertwined for a greater purpose – a life without complications. For this chapter the three headlines serve at the structure for analysing and putting forward the main points of the data generated with the Mauritian informants. These main points will later on serve as argument in the analysis of the health literacy of the Mauritians.

The first section of this chapter will be the diabetic diet and then the data on the diet of the Mauritians. The second section is the diabetic exercise, followed by the data on the exercising Mauritians. The last and third section will be on the diabetic's insulin

[79] Schulze, S, Schroeder T.V., 2010, p. 309

control, followed by how Mauritians are made available of getting their insulin controlled.

DIET

How are patients diagnosed with Type 2 Diabetes Mellitus supposed to eat or patients who are told to be at risk of developing T2DM, pre-diabetics? In this chapter I will firstly define the recommendations of the associations in Mauritius brought forth as good rules of a proper living and compare them to the Danish recommendations, and further I will account for the food culture of Mauritius.

RECOMMENDATIONS TO T2DM PATIENTS

In a hand out from Diabetes Safeguard, they recommend quite the same diet as in the Danish Diabetes Association hand out. The only difference is that the amount of different types of food is not written in metric measures, or in measures at all. It is just written: 1-2 servings per day, no matter what kind of food the new food pyramid is showing. They take their recommendations from the new food pyramid, which is shown below.

Figur 8 The New Food Pyramid - diase pamphlet

Comparing to the Danish hand out, there is a lot fewer visuals on how to construct your daily meals and how to balance your diet for either weight loss or maintaining current weight. Also there is a lot of good rules or ways to remember e.g. what groceries to buy or comparisons in calories in different groceries.

MÆNGDER OG MÅLTIDER

Men det er ikke kun, hvad du spiser, der betyder noget, men i høj grad også, hvor meget du spiser. Tallerkenmodellerne her viser, hvordan du kan fordele maden på tallerkenen afhængig af, om du gerne vil tabe dig, eller du skal bevare din vægt.

Hvis du vil ned i vægt, kan du med fordel bruge slanketallerkenmodellen, når du spiser varm mad. Fyld halvdelen af tallerkenen med grøntsager, rå eller tilberedte. Den anden halvdel er primært til kartofler, ris, pasta eller brød, men det er også her, du lægger kød, fjerkræ eller fisk. Spis gerne mager sovs eller mager dressing til.

Den almindelige tallerkenmodel viser, hvordan du kan fordele din mad på tallerkenen, når du skal holde din vægt, som den er.
Spis gerne mager sovs eller mager dressing til.

På diabetes.dk kan du se film om madlavning: Stegning, sovs og servering.

Figur 9 Diabetes Foreningens pjece s. 28

4 ØL INDEHOLDER LIGE SÅ MANGE KALORIER SOM:
- 100 G CHOKOLADE ELLER
- 2 STK. GROVBRØD MED SKRABET MINARINE OG OST 30+ OG 2 KARTOFLER OG EN HALV BANAN

4 beers contain as many calories as:
- 100 g chocolate or
- 2 pc. Rye bread with margarine and cheese 30+ and 2 potatoes and ½ a banana

Figur 10 Diabetes foreningens pjece s. 29

[80] In the hand out about diabetes from The Danish Diabetes Association it is more precise documented how much you can have a day of various types of food:

- If you have diabetes we recommend that you minimise your use of fat, especially fat from animals.
- Eat wholegrain products like wholegrain bread or rye bread and oats
- Eat a lot of vegetables at least 300 grams per day
- Eat up to 3 pieces of fruit per day
- Eat low fat meat, poultry and fish (350g per week)
- Have a low fat milk or milk product intake of ¼ - ½ litre per day
- Lower your sugar intake
- Use less salt
- Drink less alcohol
- In general – maintain a varying diet

But during an interview with the president of diase, Diabetes Safeguard, a more accurate guidance in nutrition seemed to be of awareness:

> "[I] had a Chinese lady, she was 52, she was a teacher, but she became diabetic and doctor A. – he's no longer here, doctor A. referred her to me to do nutrition education with them. So I started by asking her, what are the types of food you like? She said: 'I want to eat my rice all my three main meals. I will eat my rice and curry.' So I told her [Marie: and you managed to?] of course! If you eat rice with your salad, your vegetable it is a balanced diet, so I told her how much rice she should have for

[80] Diabetes Foreningen | Diabetes Supervision, p. 10

breakfast, how much she should for her lunch, how much should have for dinner and three months after she went off drugs."[81]

THE MAURITIAN CULTURE OF FOOD

A Mauritian meal can be described shortly – it consists of lots and lots of rice. Every meal is build up on rice and it is not a frugal amount, it is a rice mountain. And one person might not settle with a single mountain of rice. And if they occasionally do not consume rice, it is either Rotî or Dholl Puri, which are two different types of flatbread that are very common in the Mauritian cuisine. Seen on the table below from one of the articles of the literature review, it shows some of the food choices of adolescents.

Table I. Frequency of consumption of specific foods

Food item	Frequency of consumption			
	Daily	4-6 times/week	Less than once/week	Never
Milk	41.4	10.2	19.7	7.9
Sweet fizzy drinks	7.9	21.6	35.1	2.0
Fruit juice	35.8	33.6	10.1	0.7
Fruits	44.8	29.4	8.2	0.3
Vegetables (raw and cooked)	45.4	26.0	6.3	2.0
Burgers, sausages	3.6	37.7	20.3	3.3
Potato crisps	3.3	23.9	40.0	1.0
Fried savoury cakes	4.6	12.1	51.5	5.9
Sweet biscuits, cakes, pastries, chocolates	20.8	21.1	26.7	1.0
Fried chicken (e.g. KFC, "Number one")	2.3	18.8	47.5	2.6
Fried noodles, fried rice (not prepared at home)	3.3	10.6	51.5	13.2
Pulses	21.1	37.8	11.8	3.3
"Dholpuri" and "farata/roti" (not prepared at home)	6.5	12.1	51.1	9.4

Figur 11 Oogarah-Pratap, B. 2007, p. 444

The Mauritian food culture is brought to the island with the Africans, Indians, and the Chinese, which are all rice-eating cultures. These old traditions in food has been kept and accelerated over generations in Mauritius. The acceleration in the amounts of rice ingested might have something to do with the accelerating economy of the middle-income consumers, as also stressed by Chan Sun M. in her article of 2010 were she

[81] Interview | diase, Diabetes Safeguard, 13/12/2016

stresses the lifestyle chances of the Mauritians.[82] This is also a perception from several of my informants – that people eat too much rice and in general too much food. The local doctor from a dispensary in a village thought, when asked, that people in Mauritius eat too much rice.[83]

In a sugar producing country, it makes sense that a lot of the focus in the detail supermarkets is on sugar. It is easily accessible and you can get many types of sugar wherever you go, and it is of course quite cheap. Also Mauritius brand its' sugar by the 'luxury' of buying Mauritian sugar as a tourist souvenir to bring home, alongside with coffee, rum and 'Dodo birds'. The supermarkets have several of different types of sugar; the food court sells sugary desserts; and it is just everywhere as seen in the picture below. All the products on the right side are sugar.

Figur 12 Own picture – Supermarket, sugar and rice inclined

[82] Chan Sun, M., Majeed, A. & Banarsee, R. 2010, p. 3
[83] Remembered interview | Visit to the welfare centre, 25/11/2016

The lunch break will often be a visit to the food court where all the different fast food chains are gathered and the food often is fried rice, fried noodles or other fried food, or off to one of the food carts close to either the school or workplace.

Figur 13 Own picture - Bole revers

Another lunch option is of course the optional rice and curry, brought from mum's cuisine. But while people are getting more and more money at hand, it is thus more common to go to the food court, due to the kind of 'status' it gives you, by showing that you do have money enough to go there and buy your lunch instead.[84] It is also a place where people socialise with their work companions or classmates, so there is more to the meal than just the meal itself. Food has become something that shows your wealth, more than just the pleasure of eating fast food. And among all the different fast food

[84] Reference til egne noter.

chains, KFC is probably the most popular one, while fried chicken is common in the Indian cuisine as well. This is also what one of the articles within the literature review found, that adolescents tended to eat more fatty and sugary foods.

EXERCISE

This chapter is separated into two parts. The first part will describe the recommendations of exercise of the associations and later I will account for the Mauritian culture of exercising, or maybe the lack of exercising. Also I will bring forth some examples of perceptions of exercising from the island, and point at some of the barriers of why people in Mauritius do not exercise very often.

EXERCISE RECOMMENDATIONS OF THE ASSOCIATIONS

In the pamphlet from diase, Diabetes Safeguard there are no exact recommendations of how much you should exercise during the day as a pre- and diabetes patient. There are some suggestions on which kinds of exercises you could do, and also the pamphlet addresses that the balance between diet and exercise is important, but not why it is important. The Danish recommendations of the Danish Diabetes Association is:

- Move everyday
- Sundhedsstyrelsen recommend a minimum of 30 minutes of exercise a day at moderate intensity. It is important that the exercise you choose makes you breathless.
- You can divide the activity into smaller periods of 15 minutes in the morning and in the evening.

THE MAURITIAN CULTURE OF EXERCISING

In Mauritius it is not that common to see people out running or seeming to be exercising too much. It is mostly common to see people out for a run in areas of tourism (close to resorts) or in the richer areas of the island, than in the areas of the more poor part of the

population. But it is quite common to see people transporting themselves on bikes in the poorer areas.[85] As also addressed in one of the articles from the literature review, Mauritians do not move as much as they should, and this is properly due to their less active jobs, while more Mauritians get educated and works in still-sitting jobs.[86]

EXAMPLE FROM FIELD STUDIES

YOGA CLASS

I went to a yoga class together with my friend Louise who was also in Mauritius to conduct her fieldwork. She asked me to join her, so that I could see how the local welfare centre offered free exercising for women. All the women were much more advanced in their flow of the yoga so me and Louise struggled with keeping up with the somewhat elderly ladies. It was a great experience to see that there is free exercising for those who really wants to move. But what about the ladies not at home during the daytime because of their job?

AT THE GYM

In Mauritius I did a lot of exercise in the local gym. I am a trained Fitness Instructor, so I am already quite biased when it comes to techniques at the fitness centre and also in that of training programmes. I observed that I often was quite alone while training, but if I came early in the morning there was more activity. I found that the most common segment of the users of the gym tended to be young men who did weightlifting and then went back home. Sometimes a couple of woman in various ages would attend at the gym, but the intensity of their exercises would vary from very low intensity to medium

[85] Diary, 05/12/17
[86] Zimmet, P. Z., 1991, 865

intensity. Often I saw an elderly lady walking on the treadmill and just walking there for 15-20 minutes in a low tempo. I thought to myself, why not just go for a walk out in the nature? A stroll down the street? But this was her way of exercising, followed by a couple of weightlifting exercises and then she was done with exercising. I acknowledge that it is better to move, than just not to move at all, but I wondered, why not put in a bit more effort into it, now that you are already here.[87]

Comments From the Locals

On Diwali – a public day of celebration in Mauritius, were the Hindus celebrate the light, we were told to walk around in the local city. We were recommended driving from the local city and to the nearest larger city to see all the lights, which a lot of houses were decorated in, due to the celebrations. We thus decided that we could easily walk the distance while we were three adults walking together, it would not be a problem in the dark, when it was only a couple of kilometres. But when local families heard that we were to walk the distance they told us that it was impossible walking that distance in the dark, and that we should not do it. But even so, we did walk the distance, without getting in trouble and with a lot of fantastic experiences of the festive.[88]

It was quite common to get comments upon walking or bicycling longer distances than a couple of kilometres. I discussed it with the other student conducting fieldwork in Mauritius, and we came to the conclusion that they seemed to have a somewhat 'warning' attitude when telling us not to walk far distances. This might be that their parents had warned them of walking alone or long distances, and that this has become a fear I general. This is all interpretations, but the only likely explanation we could find.

[87] Diary | 05/12/2016
[88] Diary | 30/10/16

INSULIN

In this chapter I will describe what I mean by 'insulin', that I in this thesis both define it as the technology and as the NGOs' instrumental help to the patients.

DIABETES TECHNOLOGIES

THE TERM 'TECHNOLOGY'

In this thesis technology, as already addressed lies within the Techno-Anthropological understanding of technology, as procedures and artefacts. This thesis aims to analyse technologies as something both instrumental and physical. It can be different methods or technologies assisting in the treatment of the patients with type 2 diabetes or the ones in risk of developing diabetes type 2.

AVAILABLE TECHNOLOGIES

[89]While visiting the NGO's t1 diams as mentioned above, I was explained how the system of the diagnosis of diabetes is functioning. Also, they explained the different technologies available in the hospitals for the treatment of diabetics. They have test strips available alongside with insulin preparations of various kinds. T1 diams also have some test strips available and some insulin preparations, but they told me that it was for emergency cases. A problem is that the hospital will only have the amount of test strips test strips available as the diabetes patients are requesting, due to rationing of test strips. This means, that if the hospital finds that there will be three diabetes patients per day to get their tests of blood sugar levels done, the hospital will only have three test strips available. If any emergency cases will occurs, they would have to get test strips from

[89] Interview t1 diams | 22/11/2016

somewhere else, or maybe use one of the usual patients reserved test strip. Sometimes they might even have to contact the NGO to gain a spare test strip. Also the staff of the NGO told me that they were the once buying a glucometer for the hospital, while they would otherwise not have one. I asked about other technologies, to this they responded that they advised the diabetes patients an American app for their smartphones, but while this app is fitted to match the American culture, it is quite difficult for the diabetes patients to find the app useful.[90] In many different articles it is written, that it is important to take into account the individual with diabetes, take into account the sociocultural factors of the individual. So maybe both anti-diabetes programmes, other health programmes and even the treatment of diabetes not specific enough for the culture of the Mauritian. In Denmark there is a couple of different fitted apps for diabetes patients, which they can use to get inspiration for cooking, buying diabetes friendly products and also keeping an eye on the insulin level and intake in the body, and last but not least get reminders to take insulin.

Insulin pumps are very expensive and something only available in private hospitals, which any way is only for the more wealthy part of the population. A pump costs 100.000Rs while a monthly salary is normally around 8.000-15.000. Furthermore it costs 10.000Rs a month to run the insulin pump.[91]

[90] Interview t1 diams | 22/11/2016
[91] Interview t1 diams | 22/11/2016

Health Literacy & E-Health Literacy

This chapter will first of all strive to explain what Health Literacy and eHealth Literacy is, and further on connect this term to the data generated in Mauritius, to try and connect the high number of Mauritian diabetics, with the difficulties in teaching a better lifestyle for better health for both people with pre-diabetes and the ones already suffering from diabetes type 2. In this chapter the data from my fieldwork will be analysed in relation to Health Literacy and by mapping the Mauritian Health Literacy I will try to define the gap of the prevention of diabetes through Critical education and eHealth Literacy and the benefits of eHealth interventions.

THE TERM 'HEALTH LITERACY'

Health Literacy is in Don Nutbeam's article 'Health literacy as a public health goal: […]' firstly described with a citing by Parker et al.: "[A]dequate functional health literacy means being able to apply literacy skills to health related materials such as prescriptions, appointment cards, medicine labels, and directions for home healthcare".[92] But Nutbeam stresses that this definition and approach to health literacy is narrow and simplified and that "[o]ne approach simply identifies types of literacy not as measures of achievement in reading and writing, but more in terms of what it is that literacy enables us to do."[93] He then accounts for three levels of literacy. The first level is *Basic/functional literacy*, which is the "[…] basic skill of reading and writing to be able to function effectively in everyday situations […]."[94] The second literacy level is that of *Communicative/interactive literacy* and is referring to that of more advanced cognitive skills. These cognitive literacy skills combined with social skills will enable the person to act within the structure of norms and deduce information and pass on information in the informational exchange within social groups. The third literacy level is that of *Critical literacy*, which is the literacy of being able to handle information given, critically. This is a more complex literacy skill, but this enables the person to be autonomic of his or her own life in several of life events and situations.[95] Nutbeam emphasises that high basic literacy levels does not equals the desired response to health education and communication activities, but that a method for raising the critical

[92] Nutbeam, D., 2006, p. 263
[93] Nutbeam, D., 2006, p. 263
[94] Nutbeam, D., 2006, p. 263
[95] Nutbeam, D., 2006, p. 264

literacy level, might align the gap of the three literacy levels described above.[96] Nutbeam further advocate the necessity of increasing the empowerment of the individuals for them to gain as much autonomy as possible.

Lynn Nielsen-Bohlman presents in her book 'Health Literacy' the term it self as an overall way of measuring how capable a person is within the health spectre by looking at their cognitive abilities, social skills, emotional state, and physical conditions (visual and auditory acuity) in context of "[…] understanding and communicating health information and concerns."[97] The measuring takes its stand in different *normal* life skills such as education, culture and language, and then also specifics within the health-related setting which affects the capability of making qualified health decisions. This is described as a person's *capacity*.[98]

To measure a person's health literacy the theory of a conceptual framework has been put forward by Nielsen-Bohlman, where the health literacy term has been divided into three key sectors; *Culture and Society*, *The Health System* and *The Education System*. And it is to notice that Nielsen-Bohlman points out that all three sectors provide what she calls 'intervention points' which can turn out as either challenges, which makes it more difficult for a person to comprehend different aspects of the three sectors or opportunities for improvement for higher health literacy.[99] The sector of *Culture and Society* stands for

> "[…] native language, socioeconomic status, gender, race, and ethnicity, along with influences of mass media as represented by news publishing, advertising, marketing and the plethora of

[96] Nutbeam, D., 2006, p. 264
[97] Nielsen-Bohlman, L., 2004, p. 32
[98] Nielsen-Bohlman, L., 2004, p. 32
[99] Nielsen-Bohlman, L., 2004, p. 32

health information sources available through electronic sources."[100]

You can say that this sector represents the norms of culture and society.

The education System is the second sector and consists of the education programme of the country.[101] In Nielsen-Bohlman's book, she accounts for how the American education system is build up. For Mauritius this will be different due to their adoption of the British school system and Cambridge standards. It can therefore be relevant to draw references back to one of the first sections in current thesis. In the section *Education* the education system of Mauritius is addressed along with how the elder Mauritians might not be as educated as the current younger generations. Therefore their literacy level will be lower and while they might be unable to connect their literacy at home with the literacy of health, they will have troubles of being autonomous in their control of their health.

In a conversation with a doctor in a village's dispensary the disabled autonomic state of the elderly came up. He told that a lot of his elderly patients with diabetes often are incapable of reading themselves, so whenever they got a prescription on their insulin medication, their adult children would be the ones regulating it. Therefore, the doctor often experienced that whenever the children of the diabetes patients would be out travelling, the elderly would pas by the clinic to get their blood glucose level regulated, due to their own incapability to regulate it. In worst case scenarios the elderly would just take insulin whenever they thought it was appropriate

[100] Nielsen-Bohlman, L., 2004, p. 33-34
[101] Nielsen-Bohlman, L., 2004, p. 34-35

and would end up at the hospital, due to hyperglycaemia, which is very dangerous to any diabetic.[102]

The health system sector is that of all health contexts in which the individual will be confronted with questions of relevance to their health or health-care. This includes of course all institutions within the health-care system; e.g. all aspects of the health-care system in the country, such as hospitals and clinics, even health communication and social marketing, due to the relation of the fields.[103] Nielsen-Bohlman further stresses that all aspects of the health-care system are a part of the responsibility for improving health literacy.

> "A clear understanding of health literacy can guide the health system of public health practitioners, are providers, insurers, and community agencies toward adopting definitions and policies that resolve incompatibilities between the needs of individuals and the demands health systems."[104]

And in relation to this Schulz & Nakamoto stresses the importance of engaging the consumers:

> "Communications programs must include the empowerment that motivates consumers to engage and the literacy that enables them to make informed and reasoned choices.[…] the impacts of health literacy and patient empowerment are deeply intertwined. High literacy does not necessarily entail empowerment and vice

[102] Notes | Remembered interview, Visit to the welfare centre, 25/11/2016
[103] Nielsen-Bohlman, L., 2004, p. 35
[104] Nielsen-Bohlman, L., 2004, p. 36

versa, and mismatches of the two can have deleterious consequences."[105]

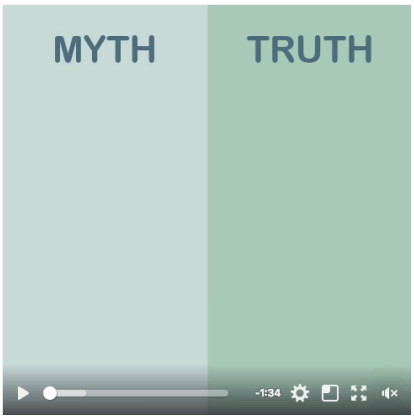
POSTS ON FACEBOOK FROM MAURITIANS

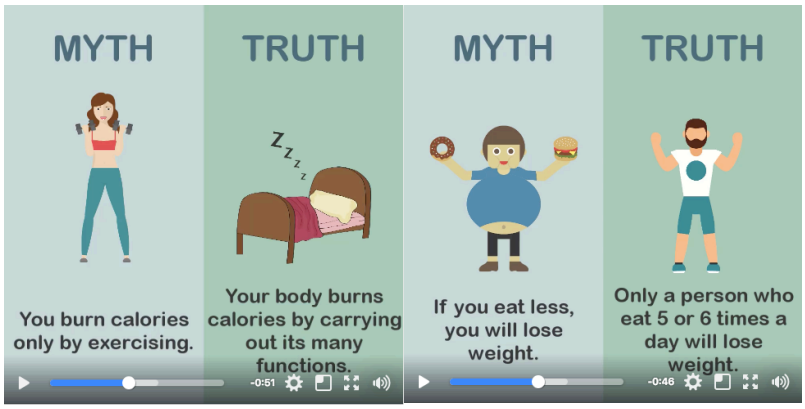
This section will be used as a visual supportive argument of the experience gained and the data generated during the fieldwork. Also it will be supporting the research question "which Cultural Health Literacies are having an effect on the prevention of Diabetes T2 in Mauritius", alongside with making a foundation for what aspects is missing in the prevention of T2DM in Mauritius. The section will address the problem of *pseudoscience*[106], which is currently booming on the Internet.

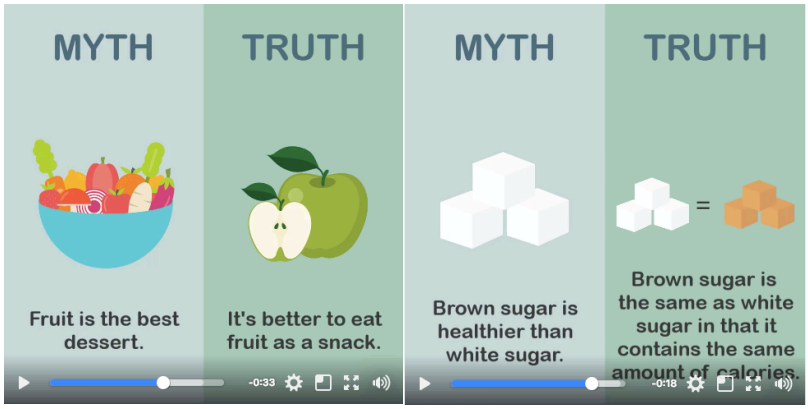
I scroll through my *Facebook Homepage* where all the posts from friends are lined up, what they have shared today, posts they have liked or commented and much more. I scroll by a post shared by a friend with a graphic video from a click-bite site called *Futusion*. The video is about myths and facts of health; "Some Of The Wrong Concepts We Had"[107] as the post says. Let us generalise a bit: everyone is striving for the truth that will slim your body and make your health better. The intention is good. But the truths are nearly equal to the myths about health. And furthermore, the graphics shows the wrong concepts of the wording in the myths, which gives the wrong impression of the wording, leading to misunderstanding, which might damage a person with a maybe low health literacy's health. Also the connection between myth and truth are failing so much that it seems like an answer to a totally different question or myth. As if someone asks you if you want to go to a party during the weekend and you respond: 'Yes I love bananas'.

[105] Schulz, P.J & Nakamoto, K., 2012, p. 4
[106] Scientific American | Mind, What is Pseudoscience?
[107] Facebook Post | Futusion Video – Truth/Myths

This is how the video ”Myth/Truth starts. The concept of this video is to kill some of the myths from our everyday life.

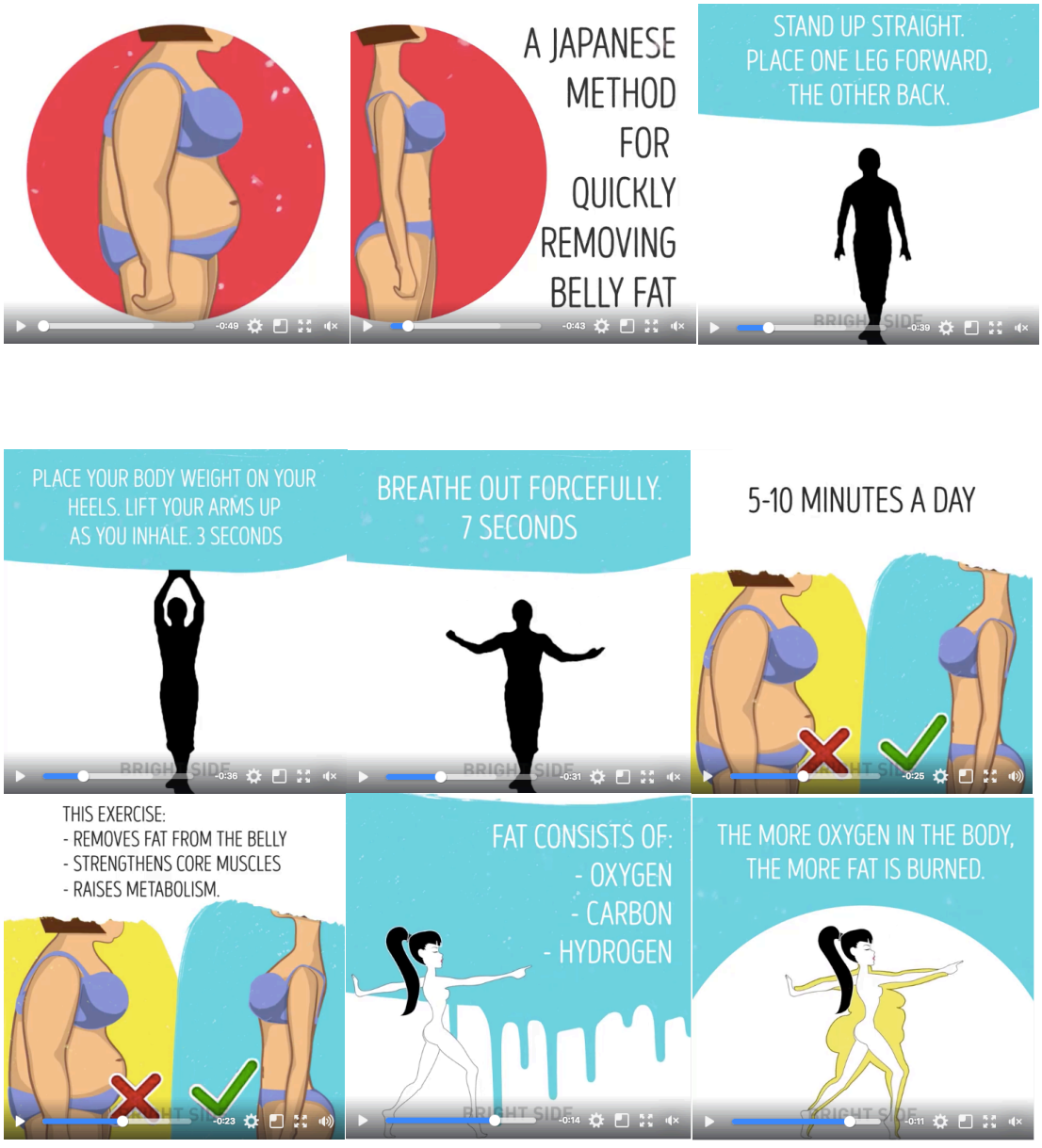






Another post and graphic video from the same person shows up a couple of days later. This time from another click-bite page on Facebook called *Bright Side.* This time it is a ‘Japanese makes perfect and healthy’ kind of video. It is a video promising that by very little effort you will get very slim very fast. Basically the advice is – remember to breathe. The argument of the advice is that fat consists of oxygen, carbon and hydrogen,

and therefore "the more oxygen in the body, the more fat is burned"[108]. It is true that calorie burning is something we human do through the mouth that we breathe out what we are burning. The problem though, is that some people might misunderstand the advice and think that they only have to put in very little effort to lose weight.



What can we learn from these kinds of posts on Facebook, from Mauritians? First of all it is important to point out, that this is not to point fingers, or make Mauritians in

[108] Facebook | Bright Side Video, Japense method for quickly removing belly fat

general seeming more stupid, but from experience during fieldwork, this is the type of advice any Mauritian would give you in any situation on questions of health. Advice with no fact checks at all compared to the advices, which as an example the Danish Health Board (Sundhedsstyrelsen) have given on living healthy, and the same counts for the Danish Diabetes Association, while there are no 'quick fixes' for weight loss. Another thing important to take into account is that of the Maurtian Health Literacy Level and eHealth Literacy. While the critical literacy level may not be very high due to lower educational level, it might be difficult making proper health decisions and thinking critical on advice from the social media.

THE TERM 'E-HEALTH LITERACY'

[109]The term eHealth Literacy is a newer term used in processes involving users in design of health care services. The term is defined by seven domains, which are:

- Knowledge about one's own health
- Ability to interact with information
- Ability to engage with technology
- Access to technologies that work
- Access to technologies that suit individual needs
- Feel that using technologies is beneficial
- Feel in control and secure when using technologies

If a user fulfils all the domains, the user have high eHealth Literacy and will be empowered in making decisions e.g. on changes in their self-care behaviours.[110] In an article by Moussa, M., Sherrod, D. & Choi, J. they find that an eHealth intervention to increase diabetes knowledge among African Americans had significant impact on diabetes knowledge after the patients within the research received tutorial sessions which included the use of eCare We Care programme. In the article the authors advocates that:

> "Social media and the Internet are rapidly making health information accessible to the general public. eHealth, or the dissemination of health information via the Internet, has been shown to be effective for improving diabetes education by

[109] Kayser, L., et al. 2015, p. 3
[110] Fuji, K. T., et al. 2015, p. 296

> increasing the availability of interactive health-related information."[111]

After a shorter search on the Internet, it was found that the Mauritian webpages on diabetes was not updated since e.g. 2004 and 2007. Taking this into account of the findings of using eHealth Literacy programmes to strengthen the knowledge upon individuals health, and here in specific diabetics, what seems to be missing for those striving to reverse their T2DM or pre-diabetes, is more information through the social media. It was found that the NGO's of Mauritius either did not update their webpage frequently, or if they were updated frequently, it was more of a promoting character, on the different projects of the NGO and not as much seeking towards sharing knowledge upon diabetes. Why not use the possibilities of an already existing webpage to share knowledge upon diabetes and how to live healthy? This could maybe lead to that of the missing key in the prevention of diabetes.

[111] Moussa, M., Sherrod, D. & Choi, J., 2013, p. 37

DISCUSSION

The first aspect of this discussion will be on my empirical data generated within the host-family. It must be acknowledge that when it is found that informants are dishonest in their relation with the researcher there is a high risk that some of the data might be invalid. Due to this source of error, I chose to exclude some of the data conducted within the host-family. This means that there might be some aspects not well covered with empirical arguments. Also it is important to acknowledge that when your perception of a relation is that of positive, loving and respect, and the perception is changed with a slap in the face, it must be taken into account that the sight upon the 'other's' society is shortly feared and not popular. Subjectively I must admit that this have been the change of my perception during this research and I have to acknowledge that it most possibly has affected the project.

It can be argued at a further literature research on diabetes in Mauritius would be of great value due to the many studies on diabetes on the island, which is really difficult to cover. The reviews of the various studies might find the missing key to reduce the prevalence of diabetes and pre-diabetes in Mauritius. It could thus also get you blinded by the different aspects of the small island, which could lead to more confusion while the cultural differences might affect the attempt to make appropriate prevention for Mauritius in general.

With foundation in the literature review and the analysis of the diabetes aspects in Mauritius along with the analysis of the Health Literacy levels in Mauritius, it can be discussed weather or not it has been efficient to bring in the eHealth Literacy aspect in prevention of diabetes in Mauritius, while the Information technologies in Mauritius are

not yet as far in development as for instance the Danish information technologies which includes various applications for smartphones to control the glucose level of diabetes patients. Thus eHealth Literacy education helps and empowers the diabetes patients and strengthens them in their own control of their life's, it can be argued that Mauritius might not be technological well developed to start primary prevention programmes through informational technology. On the other hand it can also be argued, that due to the missing literature upon informational technology in diabetes treatment and prevention in Mauritius, this field is exactly what needs to be research in terms of conducting proper prevention programmes for the diabetes and pre-diabetes patients. In terms of pre-primary prevention programmes it seems that there is a need for more education among adolescents in colleges, while pre-primary prevention in terms of diabetes is to build up knowledge and good habits already from the beginning of life. When the adolescents learn about health and proper health decisions they might pass it onto their parents. Though this has not been mentioned before, it is thus, to take into account the hierarchy of the society, and parents maybe do not like to be taught by their children due to authority structures within the family.

CONCLUSION

It was found that the incidence of diabetes in Mauritius are high due to rapid changes in economy and with these economic changes a great impact on the lifestyle of the Mauritians. This is also due to the western influence of the food selections in both fast foods and the selections within the supermarkets. Furthermore a change in the type of jobs due to evolutionary industry has changed from that of physical jobs to that of more sedentary character. Moreover, it can be concluded that policies on compulsory health education and physical education, could be of great value in the pre-primary prevention of diabetes. This conclusion is based upon the choices of food, the lack of physical activity, and that of a poorer educational rate. In the primary prevention of diabetes in Mauritius, it can be concluded that more research into health literacy of diabetics in Mauritius alongside with pre-diabetics could be of great use in terms of designing new prevention programmes. Furthermore, it would be interesting to research the field of eHealth Literacy in addition to health literacy and the cultural health literacies in Mauritius into account. It is to conclude, that this project does not yet hold the answers to an efficient prevention of diabetes in Mauritius, but doors to further research have been opened.

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APPENDIX I INTERVIEWS

Interview, President of diase, Diabetes Safeguard, Mrs. Rani Balloo, 13/12/2016

”We already have 10 diabetes centres in operation, we started calling them microclinics, now we changed the name. We want to open 10 new diabetes prevention centres, initiate insulin pump therapy for children with only type 1 diabetes, not all but a few. Toddlers especially.” [0:05.40]

…

[00:13.42]

Rani: “[…] they go to the hospital, they go at their appointments they come back with vials of insulin and they don’t inject themselves […] and with complications the government have to pay them for their complications. So why not instead of giving them the vials […] but I could not get funding.

Louise: “That is a problem because everything you will do in this process will somehow cost some money.”

Rani: “Well of course it will cost money.”

Louise: “That is also what me and Marie we talked about eh, the whole eh funding situation, with ehm, how you get money from different companies.”

Rani: “And now everything has been frozen because they have decided that they want to have an upperhand on this money […] and all the companies will get 50% of the CSR in the fund which they will use for poverty. I wonder what he mean, what they mean by poverty.” [00:14.42]

…

Rani: ”The nurse will say eat half bread with your morning tea, half apple at 10am, you eat half bread for lunch, and after half apple you have a cup of tea without sugar, tea biscuit or snacks, and then half bread again […] it is the living – the patient will say i’m going off.”

Marie: ”Who is couselling like this?”

Rani: ”The nurses”

Marie: ”The NCD?”

Rani: ”The NCD nurses counsel like this”

Marie: ”And you think it is not the proper one”

Rani: ”Not the proper way. Its not the proper way. Like eh, i had a chinese lady, she was 52, she was a teacher, but she became diabetic and doctor Akuum – he’s no longer here, doctor Akuum referred her to me to do nutrition education with them. So i started by asking her, what are the types of food you like? She said: ’I want to eat my rice all my three main meals. I will eat my rice and curry.’ So i told her [Marie: and you managed to?] of course! If you eat rice with your salad, your vegetable it is a balanced diet, so i told her how much rice she should have for breakfast, how much she should for her lunch, how much should have for dinner and three months after she went off drugs.”

Marie: ”Cus i met someone last night who said ’i love to eat carbohydrates i am hungry!’

Rani: ”Yea, but you know – yea, you know what, we Mauritians are hungry for that rice. Grateful at rice – so you can have your rice. Why instead of having a bread with butter and cheese with your tea with sugar, why not had at grant for rice with your vegetables and even your chicken and fish.” [00:34.57]

…

APPENDIX I FULLNOTES

Remembered conversation with family | 15/08/2016

(Uddrag) Vi sad ude i gangen på sofaerne og talte om mit project. Jeg spurgte ind til min host-moms uddannelse, og døtrene oversatte for mig at hun aldrig rigtig havde fået en uddannelse fordi hende mor ikke havde råd til at sende hende på college. De var 8 børn i familien, så det var begrænset hvad de havde at gøre med af penge. Hun forklarede hvordan hun arbejdede i huset og hjalp moren med at lave husligt arbejde. Senere i livet kom hun ud i industrien og arbejde. Først var hun på en blomsterfabrik hvor hun blandt andet skulle pille tjørne af roser. Men resten af processen var lidt uklar for mig, fordi pigerne havde svært ved at oversætte hendes bohjpuri til engelsk.

Notes from interview with t1 diams | 22/11/2016

(Uddrag) Vi har siddet og talt længe. Og de har forklaret mig om alle de forskellige diabetes teknologier de har til stede. De forklare mig hvordan insulinstripsne er rationeret og at de kun får udleveret et hvis antal pr. dag. Derudover fortæller de mig også at de har sponsoreret et glykometer til det nærmeste hospital således at de overhovedet har mulighed for at måle insulinen i blodet på diabetes patienterne. Jeg spørger forsigtigt ind til insulin pumperne, som jeg ved alt for lidt om, synes jeg selv. De svarer mig at det er kun folk der også har råd til at tage på privathospital som også har råd til at have en insulin pumpe. Jeg notere mig at den ene af damerne fortæller mig at en insulinpumpe koster 100.000Rs at købe og 10.000Rs om måneden at holde i gang. Det er mere end hvad de fleste Mauritiere tjener om måneden. Jeg er målløs. Staten vil slet ikke støtte så dyre præparater. […] Jeg spørger ind til hvilke technologiske remedier

de kan tilbyde deres medlemmer ift. at hjælpe dem i dagligdagen. Men damerne ryster på hovedet og siger at der ikke findes nogle smarte apps til de mauritiske diabetes patienter og at de på t1 diams henstiller til en Americansk app som er blevet rost meget.

Remembered interview with the local doctor, visit to the welfare centre, 25/11/2016

"Han fortalte mig om proceduren med patienten, sådan som også tjenestemanden forklarede mig det. Derudover fortalte han mig at der i Pointe aux Piments (den by jeg bor i) alene er langt over 200 diabetes patienter, nok nærmere 400 sagde han. Han forklarede at mange ældre mennesker var rigtig dårlige til at huske at tage deres insulin, og han mente at dette skyldtes deres læse kompetencer. Mange af dem har ikke rigtig gået i skole, primært fordi der på deres tid ikke var råd til at betale for skolegangen. Så fordi de ikke er i stand til at læse, klarer de ikke at finde ud af hvor meget de skal tage, og så lader de helt være. Nogle går dog helt i den anden grøft, og kommer til at tage for meget, hvorved de så risikere at få "hyperglucose" (?), hvilket er rigtig farligt. Lægen fortalte også at mange ikke tog det alvorlig at blive diagnosticeret med diabetes, og han mente at det skyldtes at så mange havde diabetes, hvorimod hvis nogen blev diagnosticeret med cancer, at de så tog dét langt mere alvorligt. De synes ikke at forstå alvoren i diabetes, og end heller ikke forstå at det faktisk er en sygdom som de skal lære at omgås og leve med. Jeg spurgte lægen hvad han troede var den største grund til at der var så mange tilfælde af diabetes på Mauritius, han startede med at sige at det selvfølgelig skyldtes at folk generelt indtog for meget sukker. Derudover nævnte han ikke videre selve kosten, men da jeg spurgte ind til det, sagde han at selvfølgelig spiste folk generelt for meget ris og i stedet burde spise mere brød. Dertil spurgte jeg lægen hvorfor at brød var bedre end ris, hvortil han svarede at det selvfølgelig skulle være

fuldkornsbrød, ellers var det ikke bedre. Jeg studsede lidt over lægens svar, eftersom det på mig virkede et kort øjeblik som om han ikke helt vidste hvad han talte om."

APPENDIX I DIARY NOTES

11/08/2016

(Uddrag fra dagbog) Louise spurgte mig forleden om jeg ville med ned i Welfare Centre og prøve en yoga time sammen med en masse damer. Hun havde fået at vide at vi gerne måtte komme forbi og være med på sådan en 'prøve time'. De har et system med, at man skal noteres som værende deltagende, og jo flere deltagende jo flere penge giver staten til disse timer, så de fortsat kan udbyde dem gratis. Det var super sjovt at prøve noget mere realistisk yoga med en inder som tydeligvis vidste hvad hun lavede. Det var faktisk en del sværere at følge med en jeg havde forventet, på trods af at det ikke var min første yoga time nogensinde. Men timen gik rigtig godt, og Louise fik talt en masse med de tilstedeværende damer om gender equality og meget andet som var relevant for hendes studie.

30/10/2016

(Uddrag fra dagbog) I går blev der afholdt diwali – lysets fest. Alle huse (næsten) var pyntet op med lys i enhver form. […] Vi havde besluttet os for at gå fra Pointe aux Piments til den nærmeste større by. Vi blev af vores host-families spurgt om hvordan vi ville komme frem og tilbage, og da vi fortalte at vi ville gå turen derind, som ikke er mere end nogle kilometre, fik vi at vide at det var alt for langt at gå efter mørkets frembrud og det ville tage alt for lang tid og sårn noget i den stil. Men vi var stædige, for vi havde gået turen før, og mente at det kunne vi sagtens klare. Og det gik også fint, frem og tilbage, uden problemer, og vi blev mødt af ene søde mennesker på vejen hjem som gav os masser af diwali kager – mums.

05/12/16

(Uddrag fra dagbog) I dag var jeg igen i fitness center, denne gang lidt tidligere på dagen. Der var mange flere mennesker end jeg hidtil har oplevet. Det var primært unge mænd, og det var da også rent forstyrrende for dem, da jeg dukkede op og begyndte at træne. Det gjorde næsten helt ondt på mig at se dem træne. Jeg kunne ikke lade være med at tænke på de skavanker de kunne få af at have så ringe en teknik. Og tilmed så jeg en hænge indover dashboarded på en af løbebåndene mens han gik langsomt – næsten helt i stå. Der var flere instruktører tilstede, men ingen af dem sagde noget? Det studsede jeg lidt over. Kommer nok selv fra et helt andet træningsmiljø. Hende den kreolske dame var der igen i dag. Stadig bare den samme tur på løbebåndet i gående tilstand og så et par vægtløftningsøvelser. I wonder…