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Guiding Somali clients about type 2 diabetes

Using DVD as a Tool

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Guiding Somali Clients about Type 2 Diabetes

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Immigration to Finland has increased. In 2008, a total of 28 100 persons immigrated to Finland, which is the largest number since 1917. Finland has become more international, and the number of immigrant from different cultures has grown. Health care professionals meet patients from different cultures more frequently in their work. Somalis are the fourth biggest immigrant group in Finland. In 2010 Somali living in Finland were 12985.

Purpose of this study is to produce a DVD guide about type 2 diabetes for Somali clients in their own language. The aim of the DVD guide is to give knowledge-based information about type 2 diabetes for Somali clients. The Aim is also to make the DVD guide simple and practical taking into account the needs of the target group. The theoretical framework includes Somali Client, Diabetes Care and Guidance as a research material and its meaning is to be the base of the material that is used in planning the DVD guide. There is no previous action research master thesis made on this subject.

Action research thesis combines the theory, reporting and the practical implementation. The theoretical framework includes in addition to Diabetes care, theory about action research and making of DVD guide that gives information that is obtained from the literature review. A meeting was held with group of professionals that consist of diabetic nurses, public health nurse, nutritionist and sport direct when planning the DVD guide. When the content of the DVD was agreed and the transcript was written, shooting and editing the DVD followed. The DVD guide was evaluated by diabetic nurse and public health nurse and data was collected using thematic interview and analysed using content analysis.

According to the professionals evaluation DVD guide is important tool in giving information about type diabetes. The DVD guide was clear and simple the pictured used gave more emphasize on the matter. The professionals expressed that language barrier is one of the challenging when giving guidance to immigrant client and that they will benefit from this kind of DVD guide that is done in their own mother tongue. Diet and exercise play a big role in treatment of type 2 diabetes yet the professional's felt that most of their immigrant clients were lacking information on both. The DVD guide gave information about different types of exercise that are available and healthy food alternatives in the supermarket.

Keywords: Somali client, Diabetes care, Guidance and DVD guide

Marian Ismail

2 tyypin diabeteksen DVD-ohjaus Somali asiakkaille

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Maahanmuutto on lisääntynyt Suomessa. Vuonna 2008 n.28100 maahanmuuttajia asuivat Suomessa, joka on suurin luku 1917 jälkeen. Kansainvälistymisen myötä eri kulttuureista tulevien maahanmuuttajien määrä terveyspalvelujen käyttäjinä on lisääntynyt, joten hoitotyöntekijät kohtaavat ammatissaan entistä useammin myös monikulttuurisia potilaita. Somalialaiset ovat neljänneksi suurin maahanmuuttajaryhmä Suomessa, vuonna 2010 Somali taustasta asui Suomessa 12985.

Opinnäytetyön tavoitteena on tuottaa 2 tyypin diabeteksen DVD-ohjaus Somali asiakkaille heidän omalle äidinkielelle. Tavoitteena on antaa ohjausta joka perustuu tutkittuun tietoon 2 tyypin diabeteksestä Somali asiakkaille. Tarkoituksena on tehdä DVD-ohjauksesta yksinkertainen ja käytännöllistä ottaen huomioon kohderyhmän tarpeet. Kirjallinen osuus käsitteli Somali asiakkaana, Diabetes hoito ja Ohjaus joka toimi pohjana kun suunnitteli DVD:n sisältö. Aiheesta ei ole aikaisempi tehty toiminnallista opinnäytetyötä.

Toiminnallinen opinnäytetyö yhdistää teorian, raportoinnin ja käytännön toteutuksen. Käytännön toteuttaminen alkoi tapaamisen järjestäminen ryhmä ammattilaisille joka koostui diabetes hoitaja, terveydenhoitaja, ravitsemusterapeutti ja liikunta-ohjaaja. Kun DVD sisällön oli suunniteltu ja käsikirjoitus oli valmista, alkoivat DVD:n kuvaukset ja editointi prosessi. DVD-ohjaus arvioiminen on osallistunut diabetes hoitaja ja terveydenhoitaja joita on haasteltu teemahaastattelu metodein. Aineiston analyysin on käytetty laadullista sisällönanalyysia.

Hoitajien arvioinnissa ilmeni että tällainen DVD ohjaus on tarpellinen kun antaa tietoa 2 tyypin diabeteksestä. DVD ohjaus on tehty niin että se on helppoa seurata ja ymmärtää ja käytetyt kuvat tarkensivat asioita. DVD ohjaus on tehty asiakkaiden omalle äidinkielellä mikä hyödyntää kovasti kohderyhmää, sillä yksi ohjauksen haastavinta on kielimuuri. Liikunta ja ruoalla on suuri merkitys 2 diabeteksen hoidossa ja hoitajien mielestä monet heidän asiakkailtaan puutuivat tietoa näistä asioista. DVD ohjaus antoi tietoa erillisistä liikunta muodoista ja terveellisistä ruuat supermarketissa.

Asiasanat: Somali asiakkaana, Diabetes hoito, Ohjaus ja DVD-ohjaus

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1 Introduction

Diabetes is growing problem across the nation and the world. The number of people with diabetes is increasing due to population growth, aging, urbanization, and increasing prevalence of obesity and physical inactivity. The World Health Organization (WHO) estimated the global burden of diabetes at 135 million cases in 1995, in a worldwide adult population of under 4 billion, and has projected that there will be 299 million cases by the year 2025 (World Health Organization 2006).

Diabetes is a disorder in which the body does not use the sugars in food in the usual way. Normally, some of the food digested is changed into glucose (sugar), which the body uses for fuel. Blood carries glucose to the cells where a hormone called insulin allows it to enter the cells. Diabetics produce too little insulin or none at all, or cannot use insulin properly. Then dangerously high levels of glucose can build up in the blood. Broadly diabetes is classified into three major forms. Type 1 diabetes is characterized by a complete inability of the beta cells of the pancreas to produce insulin. It is most commonly occurs during childhood and young adulthood and accounts for about 10% of all persons diagnosed with diabetes. (Tuula-Marja & Sirpa Kotisaari 2008, 11; Ann M. Coulston 2001, 441)

According to the Finnish Diabetes Association, there are about 40,000 people with type 1 diabetes and about 250,000 people suffering from diabetes mellitus in Finland. About 4,000 children under the age of 16 have diabetes. The number of undiagnosed cases of type 2 diabetes is estimated at 200,000. The World Health Organization (WHO) estimates that more than 180 million people worldwide have diabetes. This silent epidemic claims as many lives annually as HIV/AIDS.

According to studies the immigrants coming outside western countries are more likely to be in a vulnerable situation because of their health. Since their needs for health care is not often met, immigrant's quality of care is lower than the native population. (Gissler, Mali, Matveinen, Sarvimäki & Kangasharju, 2006) There has been very limited research done about the health of immigrants living in Finland.

Most diabetes education materials introduce too much information, present concepts in an overly complex manner, and use language that is for individuals with higher literacy. Print materials are often limited in their ability to reach patients with varying literacy levels and to communicate complex concepts. Multimedia programs combine text, sound, graphics, and video, which serve to reinforce and complement one another to facilitate learning and maintain audience interest. This study aims to benefits Somali clients by giving knowledge base-information about type 2 diabetes using DVD as a tool. The aim is also to make the DVD guide simple and practical taking into account the needs of the target group.

2 Somali clients

Immigration has mainly been as a result of globalization, education, work, security related issues, exploration, freedom or association through intermarriage between people from different cultural backgrounds. In this quest, people find themselves living in unfamiliar regions which need adjustments in order to fit in and go on with their daily lives. They try to adapt to the new environment and at the same time strive to achieve their full functional ability. Consequently, their health is of great concern since their ways of living and daily activities are greatly influenced by their current lifestyle and other factors. This especially involves the use of functional health facilities and resources. (Leininger & MacFarland, 2002, 12-13).

Immigration to Finland has increased. In 2008, a total of 28 100 persons immigrated to Finland, which is the largest number since 1917. Mainly 40 percent of Finland's foreign community is from the former Soviet Union and about 25, 000 of this group are Ingrian Finns and 10,000 are Estonians. The next largest group is composed of Swedish citizens, of whom there are around 8,000. At this moment Finland can expect the growth in immigration flow to rise up due to its participation in the European Union. Mainly immigrants are those coming from neighbouring countries. For that reason Finnish society and attitudes will have to adjust to the temporary and permanent presence of an increasing number of people with foreign background, especially those coming from outside Europe. In 2010 Somali living in Finland permanently were 5570, but Somali language mother tongue speakers were 12985 (Ministry of education publications 2010, Statistics Finland 2010)

Due to the immigrants' move from their country of origin, the changes they face affect their general health and wellbeing which include among others social, spiritual and nutritional health. According to Leininger and McFarland (2002), nutrition is one of the key factors in maintaining good health. They state that, culture and belief have an impact on people's nutrition and food consumption that ultimately affects their health and lifestyle. Therefore it is important for nurses to learn and know what constitutes "the essential" or basic nutritional needs of people in different ecological settings. Nurses need to also know that cultural foods are a powerful means to facilitate family relationships, communication, wellbeing and illness conditions (Leininger & McFarland 2002, 206- 213).

Food culture consists of many things: such as the preparation of the food, what kind of ingredients are used, traditional foods and food that are forbidden (Partanen 2007:12). Somali cuisine varies by region and includes a variety of dishes. Somali cuisine has been influenced by Italian and in Finland, the diet also appears to be influenced by Finns.

Traditionally, cooking and cooking skills are transferred from mother to daughter. It is preferred to make fresh food rather than to buy readymade (Tiilikainen 2003: 145-146).

Religion and culture has been the strength of Somalis for centuries. It also became a factor preventing the use of the available and conventional health care system. Somalis prefer and seek out traditional homeopathic means of healing when it comes to health and wellness. According to a Community Health Assessment report produced by York Community Services (YCS, 1999), illness is not perceived as a negative outcome within Somali communities. Instead, it is believed that ailments should be accepted with dignity as they are an opportunity “to be penalized for sins and gain forgiveness from God”.

Islam plays a major role in the lives of many Somali immigrants, influencing their views of illness and recovery. It is a common belief that ultimately every illness occurs under God's will, even though some diseases are thought to be caused by bad spirits and the “Evil Eye” or witchcraft. Prayers, herbs and other forms of prevention are a part of the healing for all (Bhui et al., 2006)

However, there is an increasing body of knowledge concerning the impact of culture and ethnicity in health care, which is usually; based on the notion that illness and health beliefs and practices are culturally bound. This means that in order to provide effective care for clients from different ethnic groups, these beliefs and practices, should be taken into account and respected (Meleis et al 1998; Andrews 1999)

Leininger & McFarland (2002, 181), advise that since the nurse appears in the centre of many cultures in care delivery, thus, it is important for the nurse to first understand his or her own personal and professional culture and then to become knowledgeable about other cultures. This becomes essential in giving care in multicultural settings. Cultural knowledge also provides nurses with organizational elements of cultures and current information on what is necessary in providing effective nursing care. It decreases misinterpretations by the nurse and supports the client's co-operation (Stanhope & Lancaster 2000, 144-146).

The orientation in trans-and-cross-cultural models and theories is often focused on explaining to the health care providers from the majority population how the health care issues are structured and understood in ethnic minority populations. Leininger's theory is one example of models such as these (Leininger 1991). She claims that culturally congruent or beneficial nursing care can only occur when the individuals, groups, families, the communities or the care cultures, values, expressions, or patterns are known and used appropriately by the nurse. This is done with the help of professional assessments when decisions are made about what kind of help the patients should be given and how they should be helped (Andrews 1999).

In this study the purpose is to produce a DVD guide for Somali client, throughout the process of planning, editing and producing the DVD, Somali culture and beliefs were known and used appropriately taking into account food culture and health beliefs.

3 Diabetes care

Clients are expected to have the opportunity to participate in their care. Clients' active participation in their own care is expected to contribute to increased motivation to improve their own condition, adherence to prescriptions, better treatment results and greater satisfaction with received care. Consequently, client's participation is an important factor in health care. Knowledge of clients' understanding of participation is thus of great importance for nurses in their efforts to meet patient expectations and for quality of nursing care. According to Sainio et al, the nurse ought to provide adequate and correct guidance and clients must have the ability to understand and choose between alternatives and make decisions about their own nursing care. Diabetes mellitus is one of the major chronic diseases; therefore, it is best treated by a balance of traditional medical care and the day to day practice of self-management skills. Guidance on self-management is vital in the care of diabetes mellitus; it assists patients in taking responsibility for day to day care of their disease. Self-management also assists patients in learning that they can influence the adverse effects of their disease.

Diabetes care is a lifelong commitment that involves; monitoring blood sugar, healthy eating, regular exercises and diabetes medication/insulin therapy. It has been reported that diabetes is better managed through the use of holistic integrated approach whereby patients are encouraged to adopt health lifestyle changes to improve weight and physical activity levels to know what their blood pressure, cholesterol and blood glucose levels are and to know what these levels should be and how to achieve this targets. Physical activity has been shown to be inversely related with obesity and fat distribution, particularly visceral obesity. Studies have shown that physical activity may reduce risk of type-2 diabetes both directly by improving insulin sensitivity and indirectly by producing beneficial changes in body mass and body composition. Benefits of exercise Regular physical activity increases muscle-related energy expenditure, improve insulin sensitivity, reduce blood pressure and improve lipid profile. Exercise improves glycaemic control in T2DM (Aalto, A. 2002).

Generally, any form of exercise with duration of 30 min is recommended to aid weight loss, when accompanied by an appropriate diet (Kriska, 2003). When a diabetic person performs physical exercise, there is an increased risk of hypoglycemia (Low blood sugar) if enough carbohydrate is not eaten in the correct time. On the other hand over eating carbohydrates

can cause hyperglycemia (high blood sugar). The diabetic patient thus is responsible for balancing the correct amount of carbohydrates with insulin to sustain them through physical exercise.

Daily diet intake has a role on increased weight, central obesity and insulin resistance and causing future developing of diabetes. There are growing evidences that an increased level of free fatty acid and more importantly the relative amounts of saturated and unsaturated fatty acids play an important role in development of insulin resistance. Cross sectional epidemiological studies demonstrate positive associations between intake of saturated fat and hyper-insulinemia (Dippenaar & Haag 2005). The amount and type of food consumed and the timing of eating are integral components of the management of diabetes. The role of health professionals is to assist patients to achieve and maintain optimal metabolic and physiological outcomes. Nutritional objectives should be determined in partnership with the patient, taking into account individual needs and helping him/her to adopt and maintain a healthy lifestyle within the context of his or her culture and associated food preference.

The perception of health by Somalis is reflected by their values and beliefs. For example, based on Somali culture, obesity is considered to be healthy, prosperity and wealthy symbol. (Hassinen-Ali Azzani 2002: 37), on the other hand there are no official dietary recommendations or nutritional advice in Somalia, as the nutrition and food are considered the basic for survival. When moved to western countries, which pays much attention to nutrition, providing a lot of nutritional advice has lead to culture shock for many Somalis (Renzaho 2003). Awareness in diverse cultures, the eating patterns of cultures and the way foods are used can help individuals stay well when they are ill, also eating culturally desired foods can lead to a quicker recovery from illness and produce greater client satisfaction than when they are expected to eat strange or taboo foods (Leininger & McFarland 2002, 206- 213).

It is important that goals for weight management are set in partnership with the patient and are realistic and practical. Between individuals there will be variable rates of weight loss depending on a variety of factors, including personal and genetic, ethnicity, age, gender and previous weight loss. It has been suggested that, weight loss is further complicated by increased availability of high-fat foods and reduced weight opportunity for physical activity. Studies such as the Finnish Diabetes prevention study have highlighted the importance of lifestyle changes aimed at reducing weight as having a major role in preventing or delaying diabetes mellitus in people with impaired glucose tolerance. Dietary management is an integral component of the overall management of type 1 and 2 diabetes. The plethora of dietary information available to patients from a variety of sources can make the implementing dietary change a confusing and stressful process. Healthcare professionals should ensure that the dietary advice provided is clear and consistent to enable patients to make informed choices and achieve glycaemia control.

Previous research has suggested that professional support may be a powerful factor influencing the way the individual both adapts and manages his or her disease (see Thorne & Paterson, 2001). Few studies, however, have investigated the relationship between support from the health care professionals and coping in adults with diabetes. Family support has been recognized as vital for adults with diabetes. The family may provide assistance with the day-to-day management of the disease as well as encouragement and support in decision-making to cope with the stressors that may exacerbate the disease (Auslander & Corn, 1996; Chappell & Guse, 1989; Ford et al., 1998; Jacobson et al., 1994).

There are a lot of literatures on type 2 diabetes in other languages, but there is limited information about type 2 diabetes in Somali language. Most of the Somali food consumed everyday contains high amount of carbohydrate, fat and protein, thus the DVD guide gives information about healthy diet and exercise not only for type 2 diabetes client but also for all Somali clients.

4 Guidance

The law on the patient's position and rights (17.8.1992/785) obligates the health care professionals to tell the patient in a clear and understandable manner about his/her health status, the significance and alternatives of the care enables the patient to participate decision-making concerning his/her health. Giving information is a part of patient care and also gives ground of the right of self-determination. Patients are supported to take responsibility about their care and wellbeing by giving information, guidance and education. (Kassara etc. 2004, 41- 42; Lauri 2007, 9.)

Clients have individual informational needs depending on their age (Siponen & Välimäki 2003), educational level (Macpherson et al. 1996b, Chaplin & Kent 1998, Chien et al. 2001), the duration of the illness (Chien et al. 2001) and diagnosis (Svensson & Hansson 1994, Alexius et al. 2000). It is also noticeable that various factors, such as the quality of the therapeutic relationship between patient and staff and staff's communication skills have had an impact on successful patient guidance (Crowe et al. 2001, Maguire & Pitceathly 2002, Allen et al. 2003).

As the time spent in the hospital becomes shorter, good patient guidance has become an important factor. Patient and close relative guidance is challenging, which is why it is good to prepare beforehand for the guidance situation. It is good to use different guidance methods such as technical informing methods and demonstration. As diabetes is a lifelong chronic disease, with frequent consultations with health care providers for ongoing guidance and support, the health care system is a support system that may influence the individual's coping

and well-being with diabetes. The health care professionals may primarily provide practical support as well as guidance about the medical treatment regimen and self-care activities.

Health care providers have always been concerned with providing timely health information that is high quality, evidence-based and patient-centred. Informational interventions include explanation, education, guidance, and/or counselling to assist individuals and family members in attaining personal health goals and managing their illness. It is estimated that 75% of clients will remember what they saw, heard 10% and 90% are aware through their sensation of what they have seen and heard (Kyngäs ym. 2007, 26-27)

Clients are different and they have different information and skills (Kyngäs 2007, 26 27). By discussing with the clients, his expectations of the guidance can be surveyed. People, who actively look for information or have been sick for a long time usually knows how to tell their need on guidance. However, some of the clients do not identify their needs on guidance or do not bring it out so the contents of the guidance should be clarified. Also clients and nurses opinion on guidance need might be very different (Kääriäinen & Kyngäs 2006 8).

Communication is an important facilitator in administering and receiving health since it facilitates a smooth transition in everyday life. Communication can either be verbal or non-verbal and it is considered important because it has different meanings across different cultures (Stanhope & Lancaster, 2000, 150-151). McCabe and Timmins (2006, 110) explain that some cultures may be very expressive in the way they communicate such as using their hands, facial expression and voices in a way that can be perceived as argumentative or loud. The behavior may be perceived as unnecessary and aggressive by less expressive cultures. As a result, nurses may regard such behavior as demanding or even intimidating and may avoid the patient or be defensive.

Studies have also demonstrated that a combination of different education methods enables the provision of standardized care information to patients, which appears to improve knowledge and satisfaction (Jones et al. 2001, Proudfoot et al. 2003, Haynes et al. 2005, Johnson et al. 2005) Most diabetes education materials introduce too much information, present concepts in an overly complex manner, and use language that is for individuals with higher literacy. Print materials are often limited in their ability to reach patients with varying literacy levels and to communicate complex concepts. Multimedia programs combine text, sound, graphics, and video, which serve to reinforce and complement one another to facilitate learning and maintain audience interest (Health Educ Behav 1997;24:35-53)

There is a growing recognition of the importance of the patients' social support system in enabling them to cope with their chronic illness effectively (Trief et al., 1998). Previous research indicates that chronically ill patients who report receiving social support to their satisfaction appear to use more active approach-coping strategies than patients without such support (Ridder & Schreurs, 1996). Support from their social environment may thus be an essential contributor to successful management of diabetes (Schreurs & de Ridder, 1997).

5 The purpose and research question

Purpose of this study is to produce a DVD guide about type 2 diabetes for Somali clients in their own language. The aim of the DVD guide is to give knowledge-based information about type 2 diabetes for Somali clients. The Aim is also to produce the DVD guide in a simple and practical manner taking into account the needs of the target group.

Research questions:

1. What is the content for DVD guide based on the literature?
2. How is the DVD guide content evaluated by professionals?
3. How the DVD guide met the needs of Somali clients based on professionals evaluation?

6 Research Method

6.1 Action research

Action research is a framework for inquiry that 'seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people' (Reason & Bradbury, 2006). Action research has, therefore, fundamental criteria distinguishing it from other traditional academic research as it has different purposes, is based in different relationships, it has different ways of conceiving knowledge and its relation to practice (Reason & Bradbury, 2006).

Action research is concerned with the real problem faced by the practitioners, followed by attempts made to find solutions of the problems. It is flexible and conducted in informal contexts to bring improvement in the existing situation. The goal of action research is both diagnostic as well as remedial (Dickens and Watkins, 1999; Lewin 1973). The outcome of action research is usually concrete product such as portfolio, folder, CD, DVD or event. In this study action research combines theory and action work, theoretical process started by identifying the research subject and using literature review. The action process is producing DVD that gives information to Somali clients about type 2 diabetes.

A significant feature of all action research is that the purpose of the research is not simply or even primarily to contribute knowledge in a field, or even to develop emancipator theory, but rather to forge a more direct link between intellectual knowledge/theory and action so that each inquiry contributes directly to the flourishing of human persons and their communities (Heron and Reason, 1997) Action research has a different relation to practice as it concerns concrete practices of specific people in specific places (Kemmis & McTaggart, 2003). Thus, the aim of action research is not to develop theory that can stand above practice, but rather to develop theory that is grounded in the particularities of the specific situations that practitioners confront. Mostly, though, in accordance with its principles, it is chosen when circumstances require flexibility, the involvement of the people in the research, or change must take place quickly or holistically.

In this study, action research model was applied and consisted of six steps. In the first step of this study (see figure 1), the researchers identified the research problem, design and conducted literature review for the purpose of this study. This step was referred to as assessment phase. In the second step of study, a meeting was held with a group of professionals who work with clients that suffer from type 2 diabetes and a Somali client. Professionals that took part in planning the DVD guide were a diabetic-, public health nurse, nutritionist and sport instructor. In the period of planning a meeting was in which all the participant brought their ideas on the content of guidance. Since the issues related to type 2 diabetes are widely studied it was important to select the content of information which included telling about the what type 2 diabetes is, causes, the treatment , healthy food habit and different types of exercises.

When the content of the DVD was agreed the manuscript of the DVD was written and schedule were made for shooting the DVD which followed editing and producing the it. A diabetic and Public health nurse were invited in evaluating the DVD and data was collected through thematic interview. Data was analysed through content analysis and the findings and the recommendation were presented and the DVD guide will be used by Somali clients.



Figure 1. Steps of action research process

This study was limited in producing the DVD guide for Somali clients about type 2 diabetes. To implement the DVD guide in the future will be up to a new cycle of action research. Given the limited time in hand it will not be possible to implement or further study the effects of the DVD guide on Somali clients.

6.2 Participant in this study

According to Morse (1989), the researcher may choose to interview informants with a broad, general knowledge of the topic or those who have undergone the experience which is considered typical. The participants of this study were chosen for specific reason which was to bring their knowledge and experience on the DVD guide. The participant have wide experience on guiding clients about type diabetes in their own specific field. The participants of this study were a diabetic nurse and public health nurse, Sport director, Nutritionist and Somali client that suffer from type 2 diabetes.

A written permission and research plan was send to the participants after permission was given by the administration board and the department of social and health services. After acquiring permit, appointments were made with the participant to participate in the interview. The participants were given the opportunity to withdraw if they felt so.

6.2.1 Planning the content of the DVD

Planning guidance material start with figuring out what kind of knowledge and skills should the target group have then establish goals for the guidance material (Jääskeläinen 2002). When making guidance material there should be a clear picture about what should the guidance material give to the target group. There should be a control of the theme and related information and skills. Guidance become more important when using experience in everyday life, work and practical training (Jääskeläinen 2002).

The content should be planned in a group because one person can't take into account all the relevant things. Member of the group may bring out new ideas and perspective. As its best this kind of group combines with educational and technical knowledge. Then the guidance material will be educational, interesting and combined esthetically using professional technician (Alamäki & Luukkonen, 2002).

The literature focused on the problem associated with type 2 diabetes and how to manage with it. In order to find a solution for the problem one needs to know the cause of the problem. After the literature review done by the researcher meetings were held for a group of professionals that consisted diabetic nurse, public health nurse, nutritionist, sport director and a Somali client that suffer from type diabetes. Researcher met the professionals three times and discussed on with each one of them separately and together the choices of the content of the DVD and they came up with variety of topic related on type 2 diabetes.

It was difficult to decide which topic to pick since there were many of them it was finally agreed by the professionals and the researcher.

Guidance material should be clear and progress logically. The educational part of the guidance material should be clear and should be presented in a effective way. The content should be divided: uplifting motivation, presenting the overall picture and connection with previous information on the target group (Alamäki & Luukkonen, 2002).

The content of the DVD present the fallowing topic: Information on type 2 diabetes, exercise, choosing healthier food, cooking with the client. A diabetic nurse who give guidance daily to Somali clients was contacted for the topic of information on type 2 diabetes. Then plan was written about the basics of type 2 diabetes care and management. It was agreed by the researcher and diabetic nurse to start with the causes of diabetes, followed by a consideration of risk factors and obesity. Then moved to the importance of self-monitoring the glucose levels in blood. The recognition and treatment of hyperglycemia (high blood glucose levels) were described. Finally, the medications used to treat diabetes type 2 was presented. The purpose was to give information about the causes of diabetes type 2 and how it is treated.

Sport director who has 10 years of experience in the field and has wide knowledge about the suitable exercises for type 2 diabetic clients was contacted. The plan was to bring out how exercise improves blood glucose levels, weight loss, increased energy levels, and general well-being. Also different types of exercise that are suitable were discussed together with sport director and Somali client with type 2 diabetic client. The manuscript was written by the researcher and sent to the sport director and Somali client with type 2 diabetes.

Information was gathered about various healthy foods and nutrition for type 2 diabetes. The aim was to bring out different food sections such as Fruit section, Vegetable section, Milk, Cheese and butter section, Bread section, Meat and fish section. This was planed together with type 2 diabetes client and public health nurse. The manuscript was written by the researcher and sent to diabetic nurse and Somali client with type 2 diabetes. It was considered the suitability and availability of food and nutrition in various grocery stores, of which was selected S-market in Espoo centre. The management of the grocery store was contacted in regards of the filming and the permission was granted.

Nutritionists, who work with group of immigrants was contacted and together we planned a menu of 3 dishes aimed for type 2 diabetic clients. It was important to include in the dishes Vegetables, Fruits and whole grain bread.

6.2.2 Shooting and editing the DVD

A professional reporter of Warsan Media Association ry was asked for technical assistance such as shooting, editing and producing the DVD guide since the budget for the DVD guide was limited. Shooting requires a high level of coordination and precision. Detailed shooting schedules were drafted and circulated to all so that all the people required for shooting are informed of dates, times and locations, as well as what is required of them. All the scenes were planned in a way that clients come to the professionals from different fields and they give guidance about type 2 diabetes, exercise, healthy food and cooking healthy food. The manuscript gave direction to the entire shooting process. Shooting lasted three and a half hours and the purpose was to have more shots to choose from, this made the editing process easier.

When selecting distance it needs to be taken into consideration what is being pictured in other words how precise the picture should be and how much detail it needs to show. For instance when interviewing someone the camera can be placed so that both interviewer and interviewee are in the picture or only interviewee. It is better to change the size of the picture and the corner during the shooting and in between scenes so that the picture is more visual. Changes should be used strictly for example moving from the picture to a smaller picture may emphasize the matter unless that is the purpose. Too many variations may be confusing and too little may cause the DVD to be boring (Keränen *ym.* 2005).

During the first phase of the editing process, all the shots have been watched then the professional reporter created an equivalent of a rough draft then began to create an order for the DVD guide. Narration and the overall pacing of the DVD guide are achieved at this point together with consultation with a diabetic nurse and a Somali client that suffer from type 2 diabetes. This rough edit allows taking more time and fine tuning the final edit. In this stage there was a chance to approve the rough edit before the final edit is made. It was important to consult the diabetic nurse and Somali client that suffer from type 2 diabetes before the final edit to make sure that none of the important information was left out. It was important to have all the information required. The final editing process included audio mixing and sound design, color correction, titles and motion graphics, as well as special effects and custom transitions. Once the final edit has been approved, the video was prepared for DVD replication/duplication. Four DVD guide copies were produced and evaluated by a diabetic nurse and a public health nurse.

A good digital guidance material is formally interactive which is achieved by a greater characteristic. A viewer can decide how to proceed for the order and speed of DVD guidance. Interaction will increase viewer's activity and expose to learning (Keränen *ym.* 2003). Viewers should have alternatives to repeat, stop and go back on the desired part. DVD makers can decide how it can be used and which order it proceeds. For example the entire

DVD guide could be watched in overall in specific order or it can be watched on desired parts. In that case everyone can define their own capacity and use their own life situation and taking into account their need of guidance. DVD is a good form for these kind of interaction producing digital materials with enough recording capacity (Keränen, Lamberg & Penttinen 2005).

The DVD guide was select so that the viewer can choose the appropriate time to watch the material. This way the viewer can decide how much time to use to familiarize the material. When watching the DVD it can be stopped and continued from the same place.

6.3 Data collection

Denscombe describe the use of thematic interviews as continuum on which an interview fluctuates. The basic premise of structure is the degree of a control retained by interviewer. Semi-structure approaches facilitates some control over the focus of interview, but facilitates the exploration of issue as and when they arise; the lighter the structure, the greater the opportunity for an exploration of the interviewee's thoughts (Denscombe, 1998).

According to Hirsijärvi and Hurme (2008), thematic interview is a flexible concept. It is used both in qualitative and quantitative research. The interview is based on certain themes which are not detailed questions. Such open questions will help in creating a versatile concept of the phenomenon. It leaves the Interview situation open to new perspectives. The thematic interview is also called a semi-structured method. The basic idea of the thematic interview is that the themes of the interview are the same for all interviewees.

In this study thematic interview was selected as method for collecting data because it enables the interview to proceed in the form of a conversation which is nevertheless led by thematically planned questions. The interviews were based on two main themes. The first theme covered how is the DVD guide content evaluated by professionals? The second theme covered how the DVD guide met the needs of Somali clients based on professionals evaluation

Interviews offer the researcher the opportunity to check that he or she has understood the participant correctly. As an on-going part of the normal talk during interviews, the researcher can present a summary of what he or she thinks the participant has said, which leads that information can be confirmed to be accurate and understanding, or can be corrected if felt to be a misunderstanding, of what has been said. Such checks can be used at strategic points during the interview as a way of concluding discussions on an aspect of the topic. Descombe(2004,78).

There were two individual face-to-face interviews that were tape-recorded; this allowed the possibility to concentrate on what was being said and to listen again. The permanent recording captured the whole conversation, as well as the tone of the voice, emphases and pauses. Thus the transcription became the data used in this study. Interviews were conducted in Finnish language and lasted from 45 minutes to an hour and took place from May to June 2010.

As stated before, in action research, the focus lays in aiming for change rather than just describing the situation. Therefore, to produce a DVD guide, the participants were shown the entire DVD and they evaluated based on their experience and knowledge.

6.4 Data analysis

Content analysis is a research method for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action (Krippendorff 1980). The aim is to attain a condensed and broad description of the phenomenon, and the outcome of the analysis is concepts or categories describing the phenomenon. Usually the purpose of those concepts or categories is to build up a model, conceptual system, conceptual map or categories. The researcher makes a choice between the terms 'concept' and 'category' and uses one or the other (Kyngäs & Vanhanen 1999)

Content analysis is a method of analysing written, verbal or visual communication messages (Cole 1988). It was first used as a method for analysing hymns, newspaper and magazine. Content analysis as a research method is a systematic and objective means of describing and quantifying phenomena (Krippendorff 1980, Downe-Wamboldt 1992, Sandelowski 1995). It is also known as a method of analysing documents. Content analysis allows the researcher to test theoretical issues to enhance understanding of the data. Through content analysis, it is possible to distil words into fewer content related categories. It is assumed that when classified into the same categories, words, phrases and the like share the same meaning (Cavanagh 1997).

According to Strauss and Corbin (1990, 61) open coding is a process where data is first broken down, then examined, compared and conceptualized, and finally put into suitable categories. Conceptualizing data happens through breaking up the data into sentences, events and observations, and giving these a name (Strauss & Corbin 1990, 63). According to Strauss et al, conceptualizing is done by asking questions like "What is this? What does it represent?" In the coding process, similar events and sentences should be coded into having the same name.

This reduces ambiguity of codes and the possibility of ending up with many confusing concepts.

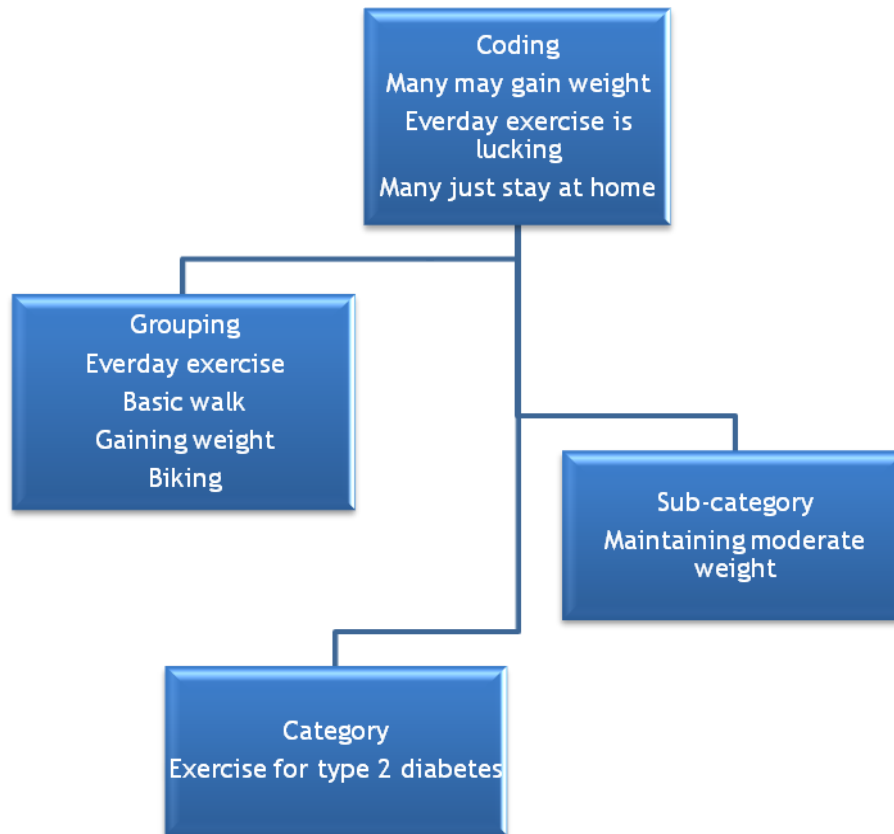


Figure 2. Data analysis process

In this study data analysis began with transcribing recorded tape interviews into written texts from word to word (see figure 3) open coding stood for writing notes and headings next to the text while reading it, the notes were collected to coding sheets for example gaining weight, luck of exercise, staying at home. The grouping and categorization process partly started while collecting the notes to the coding sheets such as everyday exercise, basic walk, gaining weight and biking . Notes were grouped within similar or dissimilar meanings. The aim was to process the notes into a reduced body of preliminary categories for instance maintaining moderate weight which came under the category of exercise for type 2 diabetes.

7 Findings of dvd evaluation

7.1 Evaluation of content information

Information presented in the DVD was seen overall important such as the definition of type 2 diabetes and the causes. The picture used to support the information given about type 2 diabetes was seen as interesting and brought more meaning to function of the pancreas and how insulin is produced and used by the body. Although one of the participants brought up the possibility that it could have been misunderstood that the production of insulin in the pancreas could weaken over the years or not at all. The participant appreciated the detailed information provided in the DVD guide about maintaining good quality of life when treating type 2 diabetes. It was concentrated on the DVD the complication of type 2 diabetes such as heart disease, kidney disease and blood pressure. The participant mentioned that it was lacking information on eye soles and blood vessels.

”siinä alussa kun puhuttiin tästä insuliinin erittämistä haimasta siinä saattoi tulla väärinkäsitys että insuliinin heikentymistä voi tulla pitkän ajan kuluttua jopa 10 vuoden päästä tai ei lainkaan, Myöhemmin hän mainitsi kyllä nämä asiat mutta se olisi ollut ok mainita siinä alussa”

“In the beginning when talked about the insulin and how it was produced by the pancreas there could have been some misunderstanding. The function of pancreas could weaken even after 10 years of having type 2 diabetes or not weaken at all. Later this was mentioned in the DVD but it would have been ok to say it in the beginning”

”Niistä hoidon tavoitteesta siitä oli hyvin elämänlaadusta juttu, mutta komplikaation ehkäiseminen siinä keskityttiin sydän ja verenpaineen sairaudesta noin kokonaisuudessa hoidon tavoitteena on komplikaation ehkäiseminen ja niitä komplikaatioita voi tulla verisuoniin, silmäpohjiin tai jalkoihin. Ehkä siitä olisin muotoilut toisin itse”

” The quality of life was well explained in the goal of treatment but preventing the complication the focus was only on heart diseases and blood pressure the goal of the whole treatment is preventing complication such as blood vessel, eye soles or feet. Perhaps I would formulated differently”

7.1.1 Evaluation content of medication

On the medication part the participant felt that it was explained in clear and simple language. Also the nurses demonstration on how to check blood glucose, use the insulin pen and injection part of the body was interesting and easy to follow. Oral medication was also mentioned and enhancing medication after period of time. One of the respondent said that the medication can be enhanced over the years but recommendation are that the treatment is assessed 3-6 month and if the objectives of the treatment hasn't been met it is changed.

”Insuliini kohta oli hyvin esitetty ainoa kohta kun hän mainitsi että pistospaikka vaihdetaan annoksen kasvaessa saa myös pienellä annoksellakin pitää pistospaikkoja vaihtaa mutta muuten kaiken kaikkiaan se oli hyvin esitetty”

” The insulin part was well presented the only thing when she mentioned the injection site changes with increasing dose the site can also be changed with small doses but otherwise it was presented well”

”Siinä lääkityksessä hän puhuu että vuosien myötä voidaan tehostaa lääkitystä. Mutta hoitosuositus tämän päivän mukaan tabletti hoidossa 3-6kk välein arvioidaan onko hoito tavoite saavutettu ja jos ei ole sitten lisätään lääkitystä, tablettien kohden se menee nopeasti. Tabletit on helppoja käyttää siinä ei varmaan tarvitse sen enempää käydä läpi olisin itsekin käynyt läpi insuliinihoitoa enemmän”

“The medication part, she talked about that medication can be enhanced over the years. But the recommendation of treatment of this day are tablet treatment are assessed 3-6 month whether objectives of treatment has been met and if it is not, medication is added, with tablets it is quickly. Tablets are easy to use there is no need to explain further I would also have gone through more with the insulin treatment”

7.1.2 Evaluation content of Follow-up

The respondent felt that follow-ups are important part of treatment of type 2 diabetes and some of the client may find difficult to understand or remember all the instruction given to them. the participant perceive the information given on the follow ups was correct though there are some changes in municipalities.

”Eli silmäpohjankuvaus oli oikein niin kuin hän kertoi ja jalkojenhoidossa saattaa olla kuntien välissä eroja esim.helsinkissä jalkojenhoitoon pääsee ainoastaan jos jaloissa on diabetesmuutoksia ja se että diabeetikkojen jalkojen tarkastuksia tehdään hoitajien vastaanotossa tai lääkärin vastaanotolla”

”So the fundusopic description was correct as she said, but there could be some differences in municipality about foot care for example in Helsinki foot care can only be accessible if there are diabetic changes in the foots and the fact that the examination of diabetic clients foot is done both by the nurse and also the doctor”

7.2 Evaluation content of exercise

7.2.1 Maintenance of moderate weight

Participant expressed that exercise is very important and most of their client are lacking that. WThis was seen something that effect their health great deal. due to luck of exercise clients gain a lot of weight in short period of time. This is seen because immigrant client are lacking knowledge on the availability of different types of exercise and rather stay at home. The participant expressed their concern as one of her client gain 10 kilo in one month. They emphasised that this kind of information should be given in early stage after their arrival to the country.

”Minusta olisi hyvää näyttää tällöinen, kun keskustellaan yleensä liikunnasta heti alussa kun he tulivat suomeen. Tässä omassa työssä on todennut monella saattaa painoa nosta jopa kymmeniä kiloja aika lyhyessä ajassa koska se arkiliikunta jää pois mitä on tehnyt kotimaassa ja monet sitten vaan jäävät kotiin istumaan. Tässä eräs minun asiakas oli muutamassa kuukaudessa lihonut 10 kilo”

” I think it is good to show this kind of discussion about the general exercise to the clients when they first arrive to Finland I have seen in my own work that many clients gain weight even up to 10 kilo within short period of time because luck of daily exercise that they used to do in their country and many just stay at home. Just recently one of my client gained 10 kilo within a month”

”Siinä missä oli pelkästään kuvia eikä tekstiä se oli hyvin havainnollinen. Jos ei ole harrastanut liikuntaa voi saada ideoita ja sanoa hetkinen, minä voisin kokeilla pyöräilyä jos ei ole aiemmin kokeilut”

”The part that had only pictures and no text was very meaningful and if you didn’t exercise before you can get some ideas and say I could try cycling if you haven’t try it yet”

7.2.2 Mental and physical health

Respondent said that the exercise guidance in the DVD was well presented and all the important effect of the exercise was explained such as metabolic improvement, sheering the mood and gaining physical fitness. They also saw important the different type of exercise presented in the DVD and the length of exercise needed everyday.

”Siinä tuli just niitä tärkeitä asioita siinä tuli aineenvaihdunnan paraneminen sitten siinä tuli mielialan piristäminen myös fyysinen kuntoon koheneminen jaksaa paremmin”

” The important things were mentioned such as metabolic improvement, cheering up the mood also physical improvement and coping better”

”Se oli minun mielestä hyvää että hän sanoi kaikki liikuntaa on hyväksi, että ei tullut mitään sellaista niin kuin ennen vanhaa oli, mikä olisi voinut jäädä neuvontaan tämä ja tuo liikunta sopii tähän tämä liikunta sopii tähän. Kuitenkin kaikki liikkuminen on hyväksi ja se oli hyvä kun hän esitteli liikunta piirakka jos hän kävisi läpi se oli havainnollisempaa”

” In my opinion it was good that she said all physical activity is good, in all times the guidance were this and that exercise is good when all kind of exercise is good and it was good she introduce the sport pie if she demonstrated it could have given more meaning into it”

”Se oli hyvää kun hän sanoi että 15 min. joka päivä on riittävä liikunta. Että ei tarvitse tunniksi mennä kuntosaliin, sen sijaan voi mennä kävelyllä koska peruskävely on hyvää liikuntaa. Jos on pitkä työmatka että jää muutama pysäkki ennen ja kävelee 15 minuuttia”

”When she said it is enough to exercise everyday 15 minutes and there is no need going to gym an hour instead you can go for walk because basic walking is enough. If you have long distant from work you can stay off few stop earlier and walk 15 minutes”

7.3 Evaluation content of healthy Food

7.3.1 Language barrier

Participant felt that the biggest obstacle in giving guidance is lack of common language. The use of translator may sometimes create more misunderstanding and things must repeat many times. Visiting at supermarket and showing healthy food option will encourage client ability to function in a supermarket and find seasonal and healthier food.

“Uskon että DVD ohjaus visuaalinen on hyvää ja jos se vielä tulee omalla äidinkielellä, muuten tulee väärinkäsityksiä ja asioita pitää käydä useammin.

” I believe that visually the DVD guide is good and if it also comes to native language otherwise there could be misunderstanding and things must be repeated more.

”Mä luulen että se vastaa somalialaisten asiakkaiden tarpeen. Monesti on ongelmana kun ei ole yhteistä kieltä, vaikka olisikin tulkki mukana se ei olisi samaa. Kun ensin joku puhuu ja toinen puhuu sen toisen, kun se tulee suoraan omalla kielellä”

” I think it meets the needs of Somali clients because often the problem is not sharing the same language although there is a translator it is not the same when someone talk and the other one translate it rather than talking directly to their native language.

7.3.2 Lack of knowledge of healthy food

The respondents expressed that immigrant client's needs information on healthy food option that are available in the supermarket. Language has impact on client ability to buy healthy food but also there is lack of knowledge on healthy food. Culture has influence on clients food habit as one of the respondent said majority of her client eat white bread and sugary product.

“Se olisi tosi hyvää jos saisi kaikille maahanmuuttajille tällöisen kaupassakäynnin kun he tulevat maahan. koska se on ihan mahdoton tietää, mitä ostaa kaupasta kun ei saa yhtään tietää mitä ne paketit sisältää”

” It would be good if all the immigrant could be guide in shopping in the grocery store when they first arrived to the country because it is so difficult to know what to buy from the shop when you don't know what is inside the box”

”Itseään se herätti miettimään näitä asioita kun puhutaan ruokavaliosta että se ei ole niin yksinkertainen ja ne ruoat voivat olla niin erilaisia. Ei riitä että kerrotaan syödään terveellisiä ruokia ne ruoat pitää löytää kaupasta. Se oli minusta hirvein hyvää että menttiin kauppaan ja kerrottiin asiakkaille että tämmöisiä ja tämmöisiä ruokia on hyvää”

” It made me think about these things when talking about diet that it is not so simple and food can be so different, it is not enough to tell eat healthy food, the food must be found from the shop. I thought it was really good that you went to the shop and told the client that this and that food are good”

”Tämä just tässäkin osiossa on tämä somali rouva osannut valita ruisleipä ja rasvaton maito että tutut ovat kertoneet hänelle. Osaako kaikki valita oikein? Ei, suurin osa syö vaaleata leipää ja suuri osa etenkin naisista valittaa ummetusta kuitua tulee liian vähän, muuttaessa tänne sitten liikunta jää myös vähäiseksi”

” Just this one as well where the Somali lady knew how to choose whole bread and skimmed milk relatives have told her to do so. Can all make the right choice? No, majority of them eat white bread and most of them particularly women complains about constipation because the intake of fiber is too low after moving to Finland and exercise remains little”

”jotenkin on semmoinen käsitys että he syövät kotimaassa terveellisemmäksi en oikein ymmärrä miksi se muuttuu täällä suomessa epäterveelliseksi johtuuko se siitä että täällä on hyvin paljon kaikkea. Täällä Suomessa käytetään niin kuin paljon leivonnaisia, sokerisia tuotteita käytetään vaaleata leipää, vaaleata jauhoa ja kuituun osuus jää vähäiseksi, opastusta pitää olla enemmän”

” I got somehow impression that they eat healthier in their country I don't really understand why it become unhealthier here in Finland is it due to the fact that there is a lot of everything in here. Here in Finland they use a lot of pastries, sugary products, white bread and white flour and the intake of fiber remains low, guidance should be more”

7.3.3 Variety of food available

The respondent felt the variety healthy food was presented comprehensively such as seasonal vegetables, low prices vegetables and other healthy food options. They also mentioned that heart friendly-label products should have been presented in the DVD as it easy to find and doesn't require language skill from the clients.

”siinä oli kuitenkin kattavasti nää tärkeimmät elintarvikkeet käyty läpi että siinä pyrittiin katsomaan just kauden vihanneksia, edullisia vihanneksia ja sitten niitä terveellisiä vaihtoehtoja”

” The most important food sectors was gone through comprehensively and the focus was on the seasonal vegetables, low price vegetables and also healthier food options”

”Ainoastaan siinä maito tuotteessa jäin miettimään että siinä voi olla aika vaikea erottaa mikä on terveellisempää, suomessa on käytössä sitä sydän merkki. olisiko se ollut hyvää esittää että tämä on sydänystävällistä tuotetta”

” In the milk product I remained thinking that it is quite difficult to separate which of the milk product is healthier, in Finland heart label is used in products. Would it have been better to show the product with heart-friendly label”

”Sydänmerkki ainoa huono puoli on että sitä pitää anoa että voi olla yhtä hyvää tuotetta mutta ei ole vaan anonut sitä merkkiä. Hyvää puoli on että kielitaitoa ei tarvitse kun merkki on esillä tuotteessa, niin ei tarvitse lukea tuotetta mikä voisi olla vaikea suomalaisillekin”

”The only disadvantage of heart label is that it must be applied and some products may be as good but just haven't applied for the label. The advantage of the heart label is that it doesn't require language skill because the label is on the product so there is no need to read which could be hard for finish client as well”

7.4 Evaluation content of cooking healthy food

7.4.1 Recipe of the food

The respondent said the three dishes used in the DVD is good, the ingredient used were seasonal, cheap and familiar to immigrant clients. The recipe was clear and easy to follow one dish at a time.

”Ruoanlaitto on varmaan hankalaa mutta siinä käytiin yksi ruokalaji kerrallaan sillä tavalla se jäsenyi, mutta jos ei ole tehnyt ruokaa aiemmin ehkä silloin tarvitsisi enemmän ohjausta. Silloin olisi pitänyt olla oikea kokkiohjelma että olisi käyty mittakannut läpi ja se olisi liian pitkä”

” Cooking is probably difficult but it was shown one dish at a time that way it seemed organized, but if someone hasn't cook before then he/she would need more guidance. Then there should have been a real cooking show and used measuring jugs and that would have been too long”

”Minun mielestä oli hyvin selkeitä ne ohjeet. Vaikka ne oli suomalaisia ruokia siellä oli myös tuttuja vihanneksia ja tuotteita, mitä käytetään kotimaassa esim. linssiä”

” I think the recipe was very clear and even though the food was Finnish there was also a familiar vegetables and products that was used in their country such as lens”

”Ensimmäiseksi kyllä kiinnitti huomioon että siinä oli perusruokaa, edullista kauden tuotteita on käytetty. Sitten kun monella on isoja perheitä, itse tehtynä ruoka tulee paljon paljon edullisemmaksi tää oli tosi hyvää”

” First think that caught my eyes were the cheap, basic and seasonal food that were used, when many have big families with self made food it is much much cheaper, this was really good”

7.4.2 Food portion

The respondent felt even though the right portion of food was shown on the plate in the DVD it wasn't enough as it was lacking conversation on the food portion which could have given more emphasize.

”Oli hyvää että oli joka ruoanlaji että oli kasvispataa, salaattia ja jälkiruokaa. Siinä olisi voinut olla enemmän puhetta, että salaattia otetaan tämän verran se olisi voinut avata ateriankoostumus paremmin, sehän oli oikea kokoiset annostukset mutta jos olisi vielä maininnut se olisi tehostanut sitä asiaa”

” It was good that there was 3 main courses Vegetable stew, salad and dessert. There could have been more talk on the portion on salad and could have open conversation on food portion in general and give more emphasize on the right portion showed”

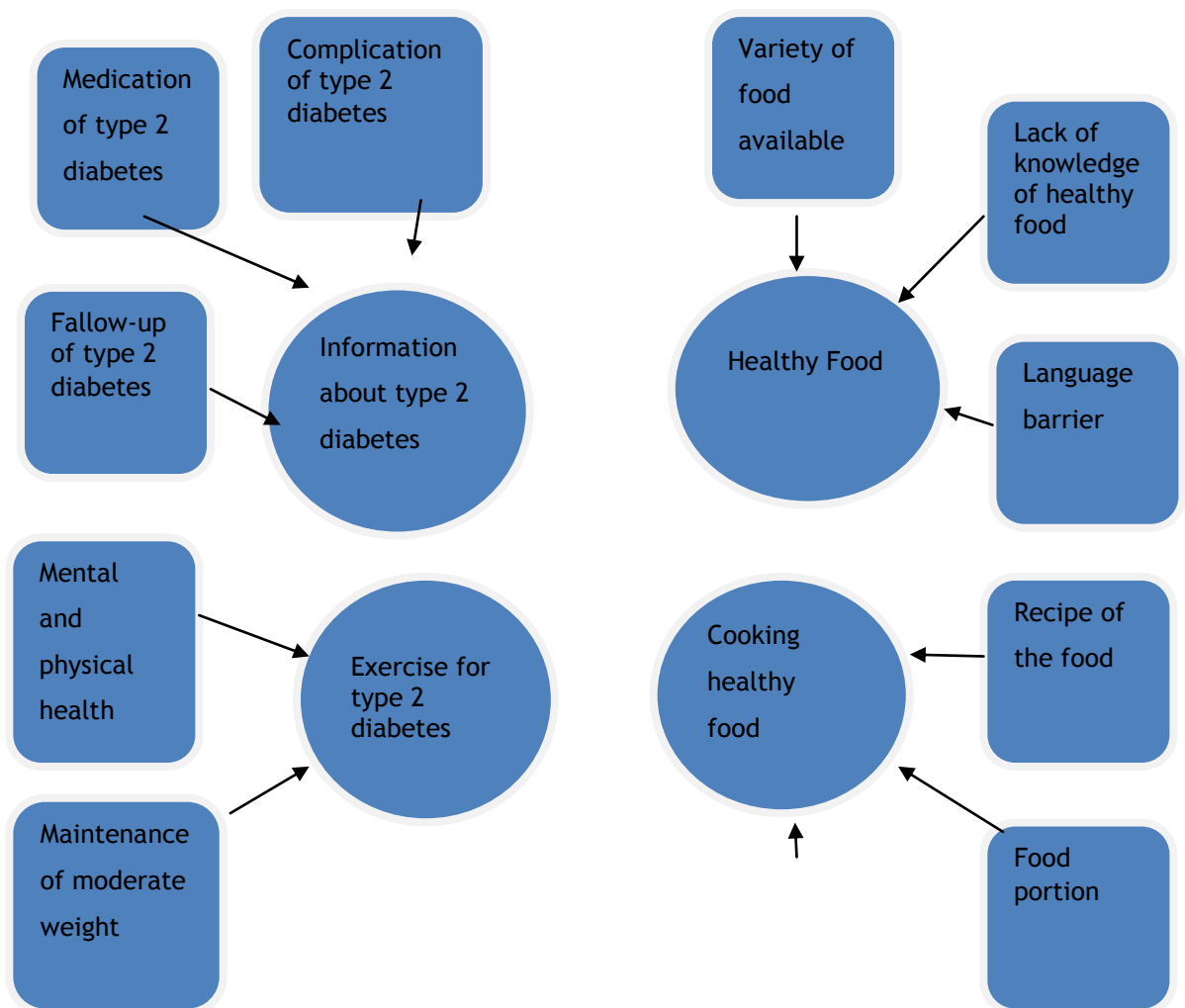


Figure 4. Findings of the research

8 Discussion

8.1 Ethical consideration

The principle of autonomy states that the individual is free to decide independently whether or not to participate in a research study. The principle of non-maleficence states that no harm should come to a subject as a result of participation in this study (Talbot 1995). A participant is a volunteer and has the right to withdraw at any point of the action research process.

A written permission and research plan was send to the participants after permission was given by the administration board and the department of social and health services. After acquiring permit, appointments were made with the participant to participate in the interview.

The researcher pays attention to the principle of human dignity. Polit et al (2002) stated that humans should be treated as autonomous agents, capable of controlling their own activities. Ethical conducts were implemented as the participants were given the right to decide voluntarily whether to participate in the study or not. Thus they have the right to ask questions, refuse to give information or to terminate their participation. The nature of the study was fully disclosed to the participants.

The obligation of confidentiality was maintained throughout the study. The participant were assured that any information they would disclose will not be reported in manner that identifies the subject; they will be assured that the information will not be made accessible to parties other than those involved in the study. The tape- recorded interview and written answers will be told to be destroyed as soon as important data has been gathered, analysed and finalised. A finished work will be forwarded to the participant.

8.2 Trustworthiness

The concept of trustworthiness according to Talbot (1995, 488) includes credibility, transferability, dependability and conformability that are objectives need to be attained in a qualitative study.

Credibility deals with the focus of the research and refers to confidence in how well data and processes of analysis address the intended focus (Polit and Hungler, 1999). The first question concerning credibility arises when making a decision about the focus of the study, selection of context, participants and approach to gathering data. Varieties of information from different articles were used in this study. Reading books and articles increases the researcher knowing. To help ensure the credibility of the data, the participants have variety of work experience that increases the possibility of shedding light on the research question from a variety of aspects (Patton1987; Adler and Adler, 1988)

Credibility ensures the plausibility of interpretations and conclusions. It means the extent to which conclusions represent reality (Talbot, 1995). Frequent consultations will be made with the facilitators throughout all the stages of the study.

The interviews were conducted in Finnish language. Interview materials were translated into English language very carefully. Quotations from the participant's oral descriptions were included in the findings to provide factual data and also tapes of each participant's oral description were transcribed.

Transferability means the extent to which study's findings would be similar in another context. Transferability allows someone other than researcher to determine whether the findings of the study are applicable in another context (Polit and Hungler, 1999). The findings in this study are unique; the result of the findings cannot be transferred to another context. Should this study be repeated under different environment, using different questionnaires, the findings will be different. However, the contents of this study can be used in some other works that are relevant to this study. The DVD guide can be used by Somali clients and the implementation of the DVD guide can be studied further.

Dependability means that others can logically follow the processes and producers used in the study and find the same or similar concepts, patterns and themes as the researcher, if given the same data, context and perspective (Talbot, 1995). The clear theoretical framework and theme interview helping analysing and findings similar patterns from the text. Steps of the analysis are described carefully, so it is possible also for others than the researcher to follow the process and come to the same conclusions.

Confrontability guarantees that the findings, conclusions and recommendations are supported by the data there is an internal agreement between the investigator's interpretations and the actual evidence (Talbot, 1995). The interview will be typed out word for word. These also guaranteed that no areas were left out.

8.3 Discussion of the findings

Diabetes self-management education is a multi-faceted process involving much more than helping patients to monitor their blood glucose or take their medication as prescribed. As patients' health status and need for support changes overtime, diabetes self-management education must reflect this and be ongoing process rather than a one-time event.

Many issues of importance concerning patient guidance on self-management were found through conducting literature review. One of the most important issues found was; According to Whitemore et al 2002, living with a chronic illness is stressful, requiring internal and external resources to maintain health and circumvent complications. There is not enough that can be said or written to emphasize that guiding patients on ways of self-management remains the key to curbing this disease that has already become an epidemic. Health providers continue to struggle with the realities of dealing with a chronic disease for which daily care is in the hands of the patient.

Research has shown that learning about one's health is most effective when individuals adopt a proactive role, when the information provided is tailored to their needs, and when multiple sources are used. To achieve this goals the researcher plan the content of DVD guide with group of professionals working with clients that suffer from type 2 diabetes and a Somali client that suffer from type 2 diabetes. The DVD guide is devided into four aspects: information about type 2 diabetes, exercise, healthy food and cooking healthy food

The overall assessment of the thesis is part of learning process. Evaluation of the aim set for the DVD guide plays important role in action research thesis. In addition one must reflect learning process and how did this support his/her professional growth (Vilkka & Airaksinen 2004). The process of making the thesis was very challenging and consumed la lot of time. Planning the DVD guide with professionals was rewarding and their expression on the need of this kind of DVD guide brought more motivation and a sense of reward. Due to the luck of experience in shooting and editing brought difficulties in grasping the overall picture but as the work progressed it became clearer. A professional editor has done the thechnical part of shooting, editing and producing the DVD guide. The entire shooting of the DVD was three hour

and the final version of the DVD guide was squeezed into 45 minutes. In the editing phase a lot of consultations were made both to diabetes and public health nurse in order to present relevant information on each part of the DVD guide. Also a type 2 diabetic client was consulted before producing the DVD guide if it was lacking some important knowledge and the minor changes he suggested were changed before the final version was produced.

The structure, style and the content of information in the DVD has reached its objectives according to the nurses that were interviewed for the evaluation of the DVD. The nurses felt that DVD guide is important learning tool for Somali client as many of them have language barrier and cannot get information they require in their own mother tongue. The respondent felt the information provided in the DVD concerning the production of insulin could be misunderstood as the information was sealed although they expressed that the insulin administration was shown detailed which made it easy to follow. The exercise guidance in the DVD was well presented and all the important effect of the exercise was explained such as metabolic improvement, sheering the mood and gaining physical fitness. They also saw important the different type of exercise presented in the DVD and the length of exercise needed every day. Immigrant client's needs guidance when shopping in the grocery store because they are lacking knowledge on healthy food; DVD guide showed healthy food available in the grocery store. The process of making the DVD guide included working with professionals from different field but share the same goal which was maintaining client health and improving their quality of life. Personally I learned a lot working with them and working on the thesis and leading it from the beginning to the end. I have deepened my knowledge on type 2 diabetes care and have grown as a professional during this process.

8.4 Future challenges

Implementing the DVD guide to target group would be very interesting although it wasn't possible because of the time limit. The DVD guide could be used by Somali client as well as health care professionals working with Somali clients. It can be used in groups and can opened discussion together with health care professionals. Some of the shot angles could be better because of the details of visibilities, but it must be taken into account the inexperience of thesis maker. Making the DVD guide was demanding and time consuming but it has brought new experience and information in shooting, editing and producing DVD. The DVD guide is in Finnish and Somali language it is important guiding tool for Somali client about type 2 diabetes similar DVD guide has not been done before. It is easy to follow, and video focuses on the essentials, and unnecessary is eliminated.

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Appendixes

Appendix 1 Application for permission

Laurea University of Applied Science

Metsänpojankuja 3

02130 Espoo

May 2010

REF: APPLICATION FOR PERMISSION TO CONDUCT A STUDY WITH IMMIGRANT TYPE 2 CLIENTS
IN PUOLARMETSÄ HEALTH CENTER

I am students of Master of Health Care in Laurea University of Applied sciences in Otaniemi, Espoo. As part of completion in my studies, I am planning to make a thesis, which aims at producing DVD for Somalian immigrant client on how to prevent/ mange type 2 diabetes.

The topic of the study is: Type 2 Diabetes Guidance for Immigrant Clients. The aim of this research is to explore and describe the guidance that Somalian immigrant client diabetes type 2 receives and how does this guidance help them in managing the disease in Puolarmetsä and Samaria health center. Participation to this study is voluntary and involves an interview with at least 6 participants. The interview will be audio taped by the researchers and later transcribed for purpose of analysis. The interview will be conducted at a setting that is mutually agreeable to the participant and the researchers. There are no risks or discomforts that are anticipated from the participants' participation in the study. A participant is free to withdraw her/his participation in the project anytime. There is no financial benefit given to participants for participation to this study. The results will be presented in seminars organized at Laurea University of Applied Sciences. The final report of the research will be published in the form of a graduate paper and DVD and a copy will be sent to Puolarmetsä health center. It is hoped that the information gained from the participant will help modifying the DVD in way that could help immigrant client to understand about type 2 diabetes.

Marian Ismail RN, BN (researcher)

E.mail: maryamidil@hotmail.com

Tel: 358 442813161

Thank-you, Yours

Sincerely

Marian Ismail

Appendix 2 Information letter

Information letter to participants

This research project is part of a study by Marian Ismail, towards higher degree requirements at Laurea University of Applied Sciences for Master of Health Care degree. The topic of study is: Type 2 Diabetes Guidance for Immigrant Clients. The dramatic increase in newly diagnosed cases of type 2 diabetes (T2D) has developed into a major public health concern within the European Union. Diabetes and its complications are crucial driving factors for growing health inequalities between the EU member states, particularly in ethnic minorities. The aim of this research is to explore and describe the guidance that Somalian immigrant client type 2 diabetes receives and how does this guidance help them in managing the disease in Puolarmetsä health center. It is hoped that the information gained from the participant will help modifying the DVD in way that could help immigrant client to understand about type 2 diabetes.

The interview should take approximately less than one hour, with the interviewer asking only a few questions, followed by discussions based on the experiences about the guidance received and how the guidance helped the participants. Each interview with participants' consent will be audio-taped for recall purposes and later transcribed for purpose of analysis. The interview will be conducted at a setting that is mutually agreeable to participant and researchers all information will be kept confidential, under lock and only accessible by the researchers. The tapes will be destroyed at the completion of the study. Participation is voluntary and refusal to participate will involve no penalty. Also participants may discontinue participation at any time they may wish to. There is no financial benefit for your participation in this study. The results of the research will be published in the form of a graduate paper and later on DVD will be produced based on the some part of information collected. If you have any complaints concerning the manner in which this research project is conducted, it may be given to the researchers, or the faculty advisor to this project on the contact information below.

Marian Ismail, RN (researcher)

Email: maryamidil@hotmail. Com

Telephone: 358 442813161

Paula Lehto (faculty advisor for this project)

Telephone: 358 400 541 479

E-mail: paula.lehto@laurea.fi

Anna-Liisa Pirnes (faculty advisor to this project)

Tele: 046 8567546

E-mail: anna-liisa.pirnes@laurea.fi Thank-you for your kind consideration and interest in this study

Appendix 3 Informed consent

Informed consent

Research Project Title: Type 2 Diabetes Guidance for Immigrant Clients.

Researcher's Names: Marian Ismail

I have been advised of the nature and the purpose of the research. I understand and agree totake part.

* I understand that the interview will be audio taped

* I understand that the tape will be used only as a basis of the writing up of the interview and Then it will be erased after publication of the study

* I understand that the contents of the tape will remain confidential to the researchers and Only included in any wider reporting in the ways that will not identify me as the interviewee

* I understand that Laurea University of Applied Sciences shall not be required to make any payment to me arising from my participation

Name of interviewee.....

Signed

Date

We have explained the study to the interviewee and consider that she understands what is involved. Researcher's signatures and date

Appendix 4. Manuscript

MANUSCRIPT

Information about type 2 diabetes

Information about type 2 diabetes started with the causes of diabetes, followed by a consideration of risk factors and obesity. The importance of self-monitoring the glucose levels in blood was mentioned and the recognition and treatment of hyperglycemia (high blood glucose levels) were described. Finally, the medications used to treat diabetes type 2 were discussed and shown insulin administration. The purpose was to give information about the causes of diabetes type 2 and how it can be treated.

The cause

- Type 2 diabetes is also known as Non Insulin Dependent
- It usually occurs usually in adults above 40 years of age
- It is the most common type of diabetes
- In this type of diabetes the pancreas does not make enough insulin, and /or the fat, muscle, or liver cells do not use it properly

The symptoms

- Most of the patients with diabetes do not present with any symptoms of their high blood sugar
- When symptoms occur, they may include extreme thirst, frequent urination, extreme tiredness, significant weight loss, impaired healing of wounds, numbness, tingling sensation of the extremities, blurring of vision, etc.

Diagnosing

- Random Blood Sugar [RBS]-Blood taken at any time of the day
- Fasting Blood Sugar [FBS]-Blood taken before taking food early in the morning
- Post Prandial Blood Sugar [PPBS]-Blood taken two hours after lunch
- Some of the other tests that may also be asked by your doctor to diagnose your diabetes
- are Glycated hemoglobin [Hb1Ac] and ketone tests

Monitoring blood sugar

- To monitor your blood sugar, you may need to depend on regular estimations of blood sugar using an instrument called glucometer
- Glucometer is an instrument which is used to measure blood glucose level
- This equipment requires only a single drop of blood and causes minimal pain to the patient
- This is also a very fast technique

Medication

- There are a wide variety of different insulin preparations available now. These may differ in species, onset of action, time to peak effect and duration of action

Site of self-injection

- The front and outer sides of the thigh
- The abdomen

Injection techniques

- Apply spirit to the injection site
- Lift up the skin at the injection site in a broad fold and insert the needle into the subcutaneous tissue
- Inject the insulin slowly
- Then press your finger against the injection site while pulling out the needle
- In order not to injure the tissue beneath the skin, it is important to rotate the injection site in the chosen area

Fallow-ups

- You could have some eye problems that you haven't noticed earlier
- It is important to recognize eye problems early while they can be treated
- Treating eye problems early can help prevent blindness

Taking care of your feet

- A diabetic patient has a special reason to treat his/ her foot well
- Meticulous foot care and the choice of suitable foot wear can prevent serious damage which are likely to occur in diabetics.

Smoking

- People with diabetes especially those over age 40 who smoke, and have high blood pressure and cholesterol are at a higher risk for cardiovascular problems
- When the large blood vessels [arteries] block, heart attack and stroke often result.
- This hardening or blockage can also happen to the small arteries that supply blood to your legs and feet
- Smoking can also leads to some serious complications like infections, ulcers, gangrene, and even amputations.

Exercise for type 2 Diabetes

The plan was to bring out how exercise improves blood glucose levels, weight loss, increased energy levels, and general well-being. Also different types of exercise that are suitable were discussed and also daily exercise. There were also shown alternative gym places and how to get information on their services.

Exercise

- Exercise is an important tool in managing your diabetes
- Most people with diabetes who exercise regularly require less medication because exercise lowers their blood sugar
- To get maximum health benefit you should exercise at least three times per week, for at least 20 -30 minutes each time

Regular exercise may help you in the following ways:

- Better control of your blood sugar
- Controls your weight
- Makes your body's own insulin work better[if you have type 2 diabetes]
- Improves your heart and blood circulation [reduces your chances of getting heart diseases]
- Lowers your cholesterol level and blood pressure
- Increases your strength and ease of movement
- Reduces stress, increases energy level and makes you feel good about yourself

Diet

Information was gathered about various healthy foods and nutrition for type 2 diabetes. It was considered the suitability and availability of food and nutrition in various grocery stores, the aim was to bring out different food sections such as Fruit section, Vegetable section, Milk, Cheese and butter section, Bread section, Meat and fish section.

Vegetables, fruits and berries, are gives good basis for eating. They can be eaten as fresh salad, raw and shredded. They lighten the diet and contain the necessary minerals, fiber and vitamins. Wholegrain such as wholegrain bread and porridge is recommended to eat versatile every day because it consists of fiber, vitamins and minerals. Milk product low fat or skimmed milk, cheese and yogurt are recommended to use moderately every day. As they make sure of receiving calcium and B2 vitamins and they are the source of protein.

- Fats contain more than twice the energy content per unit weight than either carbohydrate or protein
- About 30% of the total daily calories should be provided by fat
- Fiber is that part of grains, vegetables, and fruits that cannot be digested or absorbed in the intestine.
- At the same time it can take care of your feeling of hunger
- Fiber also slows down the absorption of carbohydrates and keeps blood sugar levels lower after meals
- Fibers also provide the feeling of fullness of stomach which is again beneficial in diabetic patients.

Cooking with clients

Cooking with clients included three healthy dishes. The plan was cook with client vegetable soup, salad and baked wholegrain bread and dessert strawberry soup. It was important to include in the dishes Vegetables, Fruits and whole grain bread so the client can try at home the recipe is also shown in the DVD. When the DVD shooting took place the manuscript were used a guiding tool which made clear the shooting process. The transcript was also used when editing the DVD though there was some flexibility while shooting and editing the DVD this guaranteed that there was space for minor changes.