Emmi Pietiläinen

Learn, understand and communicate

- tools for good patient education with a multicultural patient

A Literature Review

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Seinäjoen ammattikorkeakoulu
SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

I started the writing process in China, continued it in Uganda and finished it in Finland. I wrote this bachelor's thesis on trains, in hotels, next to banana plants and in the comfort of home. I want to dedicate it to all my friends around the world.

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Thesis Abstract

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Title of thesis: Learn, understand and communicate – tools for good patient education with a multicultural patient

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The thesis focuses on producing written patient education materials for an adult, multicultural patient. The objective was to find out what a health care professional should keep in mind, when composing such materials.

Literature review was used as a study method, and inductive content analysis to analyse the data. Two research questions were formed and answered; what is good written patient education material like and what special features should be kept in mind when patient education is targeted to multicultural patients?

Four important components of written materials were found; *quality of information, layout and appearance, comprehension* and *usability.* Three aspects of providing patient education to a multicultural patient were extracted from the reviewed literature; *learning, understanding* and *communicating.* The themes included topics such as cultural specialties, language and accepting different ways to approach health.

Conclusions were drawn from the two questions and the answers found in literature, combined with the background material collected for the study. As a result, a one-page check-list was composed to help any health care professional in making good written patient education materials for any individual or group of adult multicultural patients. The content of the check-list has two parts; first to explain the principles of composing written patient education materials, and the second to explain special features in teaching a multicultural patient. By following these guidelines, a health-care professional will be able to produce good written patient education material for their multicultural patient or patient group.

The check-list was tested on a group of student nurses and public health nurses (n=6). It is available in a pdf form for free and can be ordered from the author of the thesis at emmipietilainen@gmail.com.

Keywords: Patient education, multicultural, written material, patient, nurse, health care

SEINÄJOEN AMMATTIKORKEAKOULU

Opinnäytetyön tiivistelmä

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Opinnäytetyö käsittelee kirjallisen potilasohjausmateriaalin tuottamista aikuiselle, monikulttuuriselle potilaalle. Tutkimuksen tavoitteena oli selvittää, mitä hoitoalan ammattilaisen tulisi ottaa huomioon tehdessään mainitunlaista materiaalia.

Tutkimusmenetelmänä opinnäytetyössä käytettiin kirjallisuuskatsausta, ja aineisto käsiteltiin induktiivisella sisällönanalyysillä. Tutkimuksessa etsittiin vastausta kahteen kysymykseen; millainen on hyvä kirjallinen potilasohjausmateriaali sekä mitä tulisi ottaa huomioon kun potilasohjaus kohdistetaan monikulttuuriselle potilaalle tai potilasryhmälle?

Tutkimustuloksen mukaan hyvän kirjallisen potilasohjausmateriaalin tuottamisessa tulisi ottaa huomioon neljä osa-aluetta; annetun *tiedon laatu,* materiaalin *ulkoasu ja asettelu, ymmärrettävyys,* sekä *käytettävyys.*

Oppiminen, ymmärtäminen sekä *kommunikointi* monikulttuurisen potilaan ohjauksessa nousivat esiin tärkeinä teemoina. Englanniksi nämä teemat nimettiin termeillä *learning, understanding* sekä *communicating.* Teemat käsittelivät useita aihe-alueita, esimerkiksi kulttuurien erikoispiirteitä, kieltä ja erilaisten terveyskäsitysten hyväksymistä.

Tutkimustulosten sekä taustamateriaalin perusteella koottiin yksisivuinen ohjelehtinen terveydenhoitoalan ammattilaisten käytettäväksi. Sen tarkoituksena on auttaa hyvän kirjallisen potilasohjausmateriaalin tuottamisessa monikulttuuriselle aikuiselle potilaalle. Lehtinen koostuu kahdesta osasta; alussa selitetään lyhyesti hyvän kirjallisen materiaalin tuottamisen perusteet, loppuosassa puolestaan monikulttuurisen potilaan ohjaamisen erityispiirteet. Nämä molemmat osat huomioonottamalla voidaan onnistuneesti tuottaa hyvää kirjallista potilasohjausmateriaalia aikuiselle monikulttuuriselle potilaalle tai potilasryhmälle.

Ohjelehtinen testattiin kuuden sairaanhoitaja- ja terveydenhoitajaopiskelijan ryhmällä. Se on tilattavissa veloituksetta opinnäytetyön kirjoittajalta sähköpostilla osoitteesta emmipietilainen@gmail.com.

Keywords: Potilasohjaus, monikansallisuus, kirjallinen materiaali, potilas, sairaanhoitaja, terveydenhoito

TABLE OF CONTENTS

Tables and figures

INTRODUCTION

In Finland, good quality health care services are available to everyone. Legislation states that every patient is entitled to receiving information on their condition, treatment and outcomes, in a way that the patient can understand. The need to carry out this study stems from the importance of ensuring that this right becomes true even in a case the patient does not share the language, culture or traditions of the health care provider. For everyone working in the health care sector in Finland is required a high level of education and knowhow, it is more than justified to ensure that they are capable of providing good patient education as a part of their services.

The ability to provide good patient education materials to multicultural patients becomes even more important when the society receives more people from outside the core society. However, one should also keep in mind that every person has their own ways to think, see and interpret words and situations. What is multiculturalism and who is and is not truly multicultural, are questions this paper cannot answer.

The aim of the thesis was to find out in published literature, what a good written patient education material is like, and how to provide good patient education to multicultural patients. The object was to combine the answers to these two questions, and that way find new tools for nurses and other health care professionals to use in their clinical work, when they are composing written materials for their multicultural patients. The study did not focus on any specific cultural group or health care institution. Instead, it aimed at finding general rules that apply to most cases, and from which universal guidelines could be derived. Since any multicultural group is different from one another, and the individuals inside any group are unique persons, it seemed important to ensure the guidelines could be used in most of the situations. As a result, the findings and background information was combined into two check-lists, one in English and one in Finnish.

1 HEALTH CARE SERVICES IN FINLAND

Finland has a high quality of public health care services; the principal characteristic is their availability equally to everyone. The medical and health personnel needs to be trained, and in order to practice their profession, must have received a license from Valvira, National Supervisory Authority for Welfare and Health (Finlex: Laki terveydenhuollon ammattihenkilöstä. §4; §5). The register is public and available for anyone at julkiterhikki.valvira.fi.

1.1 The structure of health care services in Finland

Health care services in Finland are divided into public and private health care, with an addition of occupational, school and student health care. Health care actions can be preventive, primary or specialized in nature, although they do concentrate and aim at preventive measures, combined with health promotion. Public health care is provided by municipalities, for example in health care centers. Specialized health care is mainly provided in hospitals. (Ministry of Social Affairs and Health, 2013.) In addition, private health care services are also accessible to everyone, however for higher costs than the public ones.

According to the Ministry of Social Affairs and Health, the Finnish health care is, on average, good among the OECD (Organisation for Economic Co-operation and Development) countries, with 75% of health care expenditures covered by public funding. Medical care, screenings, and vaccinations are especially well organized in Finland, whereas prevention of cardiovascular diseases and reduction of alcohol consumption are not the country's best areas in health care. The statistics are based on OECD Health at Glance – OECD Indicators report (2011).

In Finland, only those with a proper education and license from Valvira, National Supervisory Authority for Welfare and Health, can work as doctors, or with an authorization as registered nurses (RN), practice the profession and use the appropriate title (Valvira: Qualified Medical Doctor. 2012; Valvira: Working as a registered nurse. 2012). However, practical nurses can work without authorization, but cannot use the occupational title, licensed practical nurse or LPN. It is also

required they have enough knowledge and suitable education, but it is common that employers hire only those with the right to the occupational title. (Valvira: Licensed practical nurses. 2012).

1.2 The right for health care services

Constitution of Finland guarantees equal treatment for everyone: (Finlex; Section 6 – Equality.) It also points out the responsibility of public authorities to make sure the basic rights and liberties are being observed (Finlex; Section 22 – Protection of basic rights and liberties.) The Universal Declaration of Human Rights (United Nations, 1948), states the right to medical care for everyone, as well as security in illness in the Article 25. Primary Health Care Act (1972) states that if any person is “in need of urgent institutional care”, they shall be assigned to a hospital bed in a health centre, or referred to another appropriate institution. Legislation governs the rights for health care for different groups in Finland.

2 PATIENT EDUCATION

Health care for permanent residents in Finland is secured by the law. Any patient should receive care in their own language and respecting their culture whenever it is possible. (Finlex: Laki potilaan asemasta ja oikeuksista, 3§.) Patient education needs to be provided by health care personnel, providing enough information on the treatment and care of the patient. If the patient's own language cannot be used, an interpreter should be used if possible. (Finlex: Laki potilaan asemasta ja oikeuksista, 5§.)

2.1 What is patient education?

Patient education can be seen and defined in several ways. Bartlett (1994, 920-923) defines patient education as a process. In this process, information is given to the patient about health matters, and it aims at assisting the patient to change health behaviour in a positive way, as well as to increase patient's compliance with medical care. Bartlett also distinguishes terms *counseling* and *teaching* from patient education; *counseling* means giving emotional support and aims to encourage the patient and make it easier for him or her to make decisions on different courses of action, whereas *teaching* refers strictly to offering facts and information regarding the topic, and aims at providing this information. Patient education, in addition, has features from both counseling and teaching, and uses tools from both activities.

Redman (1997, 3) highlights two aspects of patient education, practice and movement. The practice includes the topic specific learned skills, knowledge and theories which a health care professional masters, as well as traditions which have evolved within different areas of practice. Patient education is also a movement; how it is used and seen has changed. Patient education has become an accepted part of the nursing profession. It is no more considered that a professional should make the decisions for the patient; instead they are expected to share the information.

While patient education is partially about providing a patient with a sufficient amount of information regarding to his situation, it should not be too extended. Patients do not benefit from an overwhelming amount of data, information should only cover the problem at hand, helping the patient to overcome fears, anxiety and distress. Once these obstacles have been removed, it becomes easier for a patient to accept and benefit from patient education actions. (Bartlett 1994, 902-923.) High levels of anxiety decrease a person's ability to learn (Redman 1997, 16). In case of severe illness a patient is more likely to look for a relief of symptoms, and is not able to receive or benefit from teaching actions.

Good patient education also takes into consideration what the patient already knows (Johansson, Leino-Kilpi, Salanterä, Lehtikunnas, Ahonen, Elomaa & Salmela, 2003, 239-245). Changes in patient's health, limitations in the patient's knowledge and inability express the need for information all have an effect on the information provided to the patient. Garrud, Wood and Stainsby (2000, 301-304) note, that good written information in patient education should also include providing information on adverse effects of treatment. It is a part of good communication between the patient and healthcare provider. Including the information that may be seen as negative does not lead to increased anxiety, but may increase patients' knowledge and satisfaction. The details ought to be brief, and given to the patient during the first consultation.

Patient education can be used in several ways, by combining different forms and tools. According to Redman (2008, 813-820), patient education can be used to solve problems the patient is currently dealing with, as well as developing the patient's and his or her family's self-care capabilities. For example, The Finnish Nurses' Association (Sairaanhoitajaliitto) has published several patient education related articles. In these articles, it becomes clear that patient education is not just handing out a booklet or verbally expressing one's worry about their patient's health situation. On the website www.sairaanhoitajaliitto.fi 211 items can be found with the search term *potilaan ohjaus* (Finnish for *patient education*). The articles cover topics such as empowering the patient, composing a good written material for a patient with Parkinson's disease, good quality in patient education and so on. (The Finnish Nursing Association, 2013.)

2.2 Learning in patient education

Both content and methods need to be effective in patient education. It should be patient centred and tailored to the patient's individual needs and the way the patient learns the best. (Johansson et al. 2003, 239-245.)

Redman (1997, 21-24) mentions 5 different types of learning. They can all be applied to both adult and child learners, considering the child's developmental level.

Transfer of learning is based on the idea, that even though people forget small details and single facts, they do remember ideas, concepts, skills and so on, which can help them to prepare for situations they have never faced before. This means it is useful to teach a person matters based on somebody else's knowledge and previous experiences. For transfer to happen, it is required that the new information is being practiced and applied to several situations by the learner. (Redman 1997, 21.)

According to Redman (1997, 22) *memory* plays a big part in learning, and if it is not being used efficiently, it leads to the newly learned information becoming useless and vanishing. Making it more meaningful to a patient to learn and remember can increase the probability of the newly learned information to be stored in the long term memory. Practicing, rehearsing and using visual aids are examples of the methods which can be useful in patient education. Without sufficient help, patient is not likely to remember a lot about the new information provided in the learning situation.

Problem solving can be used as a tool, as well as a goal in patient education. Patient can be offered the necessary amount of information he needs in order to make decisions and choose between options that best fit his situation. The decided actions can be tested and evaluated, and approach changed if the situation changes. Redman (1997, 22) states that a nurse's role in the process is

to provide the information, and give different options for finding a solution to a problem.

Attitude learning can be used to help a patient form new attitude towards his situation or condition. Attitudes, as explained by Redman (1997, 23), are learned predispositions with emotional aspect to them. They are developed gradually over time, and a person may not be able to consciously realize having them. Teaching attitudes requires a support from a person, who has similar experiences with the learner, making support groups and clubs very useful. Teaching new attitudes may also be done by providing the patient with a positive experience concerning the feared or anxiety causing matter.

Psychomotor learning is a way a patient can learn new, physical skills needed in a situation new to him. He must have the body physics and capability of making mental images of the wanted new skill. These two components are used first to follow a demonstration on the new skill, and by practicing, finally to learn it. The nurse may provide the demonstration of the skill, as well as evaluating the progress of learning. (Redman 1997, 23.)

2.3 Methods in patient education

According to Redman (1997, 43), there are several major methods for delivering patient education, whether it is speaking, demonstrating, support groups or role playing. The teaching tools may be for example visual aids or written materials. In addition to Redman's list, internet could be mentioned as a source of information and modern tool of patient education in health care.

Interpersonal teaching forms. Different types of groups, whether they are formal or informal, may be used to deliver information in an economical and patient group specific way (Redman, 1997, 43-44). Psychological bonding helps the health care professional to step aside from the centre of the action, and similar stories and experiences to be shared between the members of the group. This may lead to positive changes in one's life. Problems arise when these groups are being formed

spontaneously, leading to the information shared between the members possibly being incorrect.

Role playing. When a patient needs to see his situation from another perspective, or learn new skills, it may be effective to use role playing as a method. In role playing, person providing the information may be seen by the learner as less threatening and more like the patient, possibly creating an atmosphere of mutual understanding and collectiveness. (Redman, 1997, 45-46.)

Verbal teaching. According to Redman (1997, 46), person providing teaching to a patient needs to have good verbal skills. This is for two reasons: first, the medical jargon needs to be translated to common language, and second, the patient may not possess the same level of language skills as the teacher. She should be using terminology the patient is familiar with, and not rely merely on verbal teaching, but rather combine it with other techniques.

Demonstration and practice. A patient can build a mental image of the skill he or she needs to learn, by following a demonstration of the skill. The demonstration can be done by a teacher or on a larger screen, if the target audience present is big. The skill has to be practiced by the patient in order to him or her learn it. The teaching group should be small, and redemonstartion practiced when necessary. (Redman, 1997, 46-47.)

2.4 Teaching tools

Teaching tools are audio-visual aids used in delivering information. Redman (1997, 47) points out that a well-planned teaching tool, when it has been tested and confirmed working, may be nearly self-instructional. It depends on the learner's way of learning, which tool, or media should a teacher use. Although some people are capable of absorbing information from nearly any kind of material, some need very specific ways for the teaching to be carried out. Similarly, the content of the information delivered should not exceed the learner's level of comprehension. This may lead to unnecessary difficulties when the learner has to decode the message suitable for his or her level. (Redman 1997, 47.)

Written materials. When using written material as a teaching tool, one should take into consideration the reading skills of a learner (Redman 1997, 47). How well a person can read is not connected to his or her intellectual capabilities, but may have a connection with decreased reading comprehension skills (Redman, 1997, 48, 59), that is, how well they understand the content and message of the text. However, as being the most used tool in patient education, there are some great advantages in using written material in teaching situations. First, it can save a lot of time for the teacher, and it also provides time for the learner to go over the content as many times as they feel in order to gain suitable knowledge on the subject at hand. Second, in written and print form, the information shared between different patients has the same content, thus providing everyone with the equal amount and level of information. Third, when the concept of the skill or piece of information is complex, it may be easier to understand it in a written form. However, this only applies to patients with adequate reading skills. (Redman 1997, 47.)

If the patient has no reading skills sufficient enough to understand a message in written form, the teacher has to use alternative or additive teaching methods and tools (Redman, 1997, 59). Instead of relying on delivering the message merely in written form, it should also be expressed verbally, in short and simple sentences, using a conversational language. Breaking the message into smaller components and rebuilding it makes it easier to get a hold on the idea behind the words. Asking the patient to demonstrate the newly practiced skill back to the teacher, as well as rewarding the learner after they have finished a task, such as learned the new skill, can be helpful. The material should contain visual information, such as pictures as well, for it reduces the need to understand long and complex sentences; this can also be supported by using vocabulary the patient has mastered earlier. The material has to be well organized and pretested, and anything unrelated to the topic should be left out. (Redman 1997, 59.)

Internet. Anderson and Klemm (2008, 55-63) write that internet can be used as a patient education tool in several ways, serving several purposes. Patients who lack adequate reading or hearing skills, or prefer other methods instead of traditional written materials, can benefit from different online teaching methods.

If the resources are limited, printed patient education materials may be published online. This saves space, as well as finances. These materials can, if necessary, be printed off for the patient to use. Audio and video materials can also be used in a flexible and user-friendly way on the internet, to aid those who find the common learning techniques inadequate. Internet searches can provide the patient with additional information on their condition; however, not all the information published online is correct or accurate, or relevant to the patient's situation. (Anderson et al. 2008, 55-63.)

Using email may be justified in some educational situations, for it is not limited by time unlike for example a phone counseling. Patients use email for communication with friends, relatives and even their health care practitioner. However, it requires a secure connection to ensure confidentiality (Lieberman & Morefield, 2003, 260-270; according to Anderson et al 2008, 55-63.)

According to Anderson et. al. (2008, 55-63), when internet is used as a tool in patient education, it is the nurse's task to guide and help the patient in using the medium. The nurse can assist the patient to find accurate health information, but has to be skilled in information seeking and evaluating him or herself, as well.

Visual materials. When there is a need to demonstrate a new skill related to a physical object or certain situation, visual aids can be used. They can be, for example, three dimensional models, or two dimensional pictures. A real object is preferable, but using it may not always be possible; the item at hand may be difficult in size or unavailable or too expensive to be purchased. The view may be better obtained by using a model, and sometimes using a model makes it easier to manipulate the object. (Redman, 1997, 62.) Visual materials have some disadvantages. It may be difficult to teach an abstract matter through visual demonstration. A two dimensional picture may not fully reflect the real thing, and other aids such as verbal explanation has to be used in addition to pictures. Drawings may easily lack details of the real item, but may sometimes be simpler and thus better to use than photographs. A model or picture does not have a smell, which may be needed in certain demonstrations. (Redman, 1997, 63.)

Redman (1997, 63) points out certain features a visual aid should have, when it is presented as a picture: when delivering a message to just one person, a picture on an 8½ by 11 inches (21,6 by 27,9 cm) paper is a good size, but a poster size should be used with larger groups. Flip charts or blackboard can be used if the visual material is drawn. The size of the flip chart paper should then be 32 by 26 inches (82,3 by 66 cm) in size. Pictures in education books can also be used as a visual material in patient education. (Redman, 1997, 63.)

2.5 Educating the adult patient

Different patient groups behave and receive information differently. According to Redman (1997, 24), the main difference in adult and child learners is so called critical reflectiveness. It means adults can benefit from forms of teaching and education which help them to reflect their own situation against fictional or factual stories, which in turn assist a patient to interpret and critically view their assumptions, and this way find solutions best fitting their needs. For example, support groups offer an environment where the adult patient can gain material and form a new point of view to their individual situation. When the patient is a child, it is more important to take into consideration their level of development, for example visual and verbal skills. Child merely cares about matters concerning himself, and thus is not able to reflect others' situations to his own. The child looks for answers, but is not interested in finding the reasons for his questions. (Redman 1997, 24-25.) This and the lack of ability to understand abstract matters, means a small child cannot critically reflect and benefit from stories and examples which are not actually true to him. The case changes when the young child grows, develops an imagination and starts to see things from others' point of view.

2.6 Ethical considerations in patient education

Health promotion is part of health care, and can be delivered in an educational form. It covers all areas of health care and all patient groups. It may be teaching long-term skills to promote self-care, or skills needed when certain problems in

health arise. (Leino-Kilpi & Välimäki 2004, 160-162.) The ethical challenge in patient education is how to choose and implement methods that both respect patient's own values and deliver correct information. Patient has the right to decide how he uses this information. (Leino-Kilpi et al. 2004, 165.)

A nurse or any other health care professional uses an authoritarian power over a patient. However, if this is not kept in mind while providing a patient with information and teaching, it may not only lead to unfavourable results for the patient, but also be unethical. Redman (2008, 813-820) says that it is unethical to promote a goal favourable to the society but not chosen by the individual, as well as to use patient education for, against the patient's will, forcing him bear with uncomfortable treatment. Withholding information, misjudging the patient's skills and abilities based on health care professional's own assumptions, or requiring a change the patient is not willing to make are all considered as unethical.

Leino-Kilpi et al. (2004, 77) note that in order to fix ethical conflicts between the health care provider and user, the patient, the provider needs to understand that a person has the right to make decisions on their health. This does not remove the nurse's responsibility to help; they need to listen to the patient and allow him to take part in his own care. The nurse needs to understand the patient's self-perceived resources, and how he wants to be treated. Age, developmental level and end-of-life care bring challenges the nurse should be aware of.

According to Redman (2008, 813-820), patient's historical and cultural background should be considered in patient education. This is needed in order to prevent denying equal rights from all the patient groups, but rather provide everyone with same amount of culturally sensitive information, despite their idea of health or health beliefs. The society has an obligation to provide its members with such amount of information and self-care skills supporting education that they can make decision concerning health and live a life of normal length. However, this obligation is not always sufficiently met.

The healthcare provider needs to know the matters which may affect health promotion and limit patient's ability to receive information. These matters may be physical, for example pain, or psychological, for instance fear, anxiety or

depression. The patient may also have values and self-care habits which affect the way he receives information. It cannot be assumed that he would be able or willing to change after a short period of health education. (Leino-Kilpi et al. 2004, 167).

3 MULTICULTURALISM IN FINLAND

Multiculturalism and multicultural people are a part of many people's lives. They have many definitions, and come in many forms.

3.1 What is multiculturalism?

The word *multicultural* means "of, relating to, or comprising many different cultures or ethnic groups." (Webster's New Century Dictionary, 2003, 433). Dictionary of English Language and Culture (1993, 874) defines it as "including people or teachings from several different cultures." Oxford English online Dictionary describes the adjective as "of or relating to a society consisting of a number of cultural groups, esp. in which the distinctive cultural identity of each group is maintained."

In this thesis, the term is used to mean any of the ethnic groups or individuals in Finland that do not share the same language or culture with the majority of the citizens. However, it is not strictly limited to any group, and refers to also those who hold the residency of Finland and speak Finnish as their mother tongue or second language.

3.2 Multicultural diversity in Finland

There are several types of multicultural groups in Finland. Their length of stay varies from few weeks to life-long. There are also differences in what health care services they are entitled to depending on their status and visa they are holding. Permanent residents of Finland are entitled to public health care, both primary and specialised. However, no patient should get untreated in emergency situations in Finland, regardless their status.

Immigrants and refugees. In 2011, 4558 foreigners were admitted to citizenship in Finland. Of these, majority (1399) came from Russia. The number has slightly increased from 2006, when 4433 people got the citizenship. Also then, Russians

were the majority In 2006 the second largest nationality represented was Somali (445 people), whereas in 2011 it had changed to Estonians (302 people). The citizenship was admitted to 96 Somalis. Swedish, Turkish, Iraqis and Iranians, amongst others, have also been admitted to citizenship since 2006. (Statistics Finland.) The law guarantees these people all the same rights to health care, as the native Finns (Finlex: Laki potilaan asemasta ja oikeuksista. §3). In 2012, 31 280 people immigrated to Finland, the number being slightly bigger than in 2012 (Statistics Finland, 2013)

Students and teaching staff. According to Garam (2011, 6-7), in year 2011, 9171 foreign students came to study in Finnish universities and universities of applied sciences for a period of 3 months or longer. In universities this means a 1% increase, and in universities of applied sciences a 3% increase compared to year 2010. In year 2011, 2480 students came to Finland for less than three months, twice as many in universities, but 18% less in universities of applied sciences compared to 2010, meaning an increase total of 11%. Most students came from other than European countries.

Not only students, but also teaching staff and specialists came to Finland for both short term lasting at least a week but less than a month, and for a long term period lasting a month or more (Garam 2011, 43-45). In 2011, there were 81 comers for a long term exchange, but as many as 2037 coming for a short term. Most of all the teaching staff and specialists came from Germany, Russia and The Netherlands for a short term exchange, and from China, Russia and The United States for a long term. The figures only cover teaching staff to universities of applied sciences.

Students come to Finland to study in a degree programme in both universities, as well as universities of applied sciences. According to Center of International Mobility, in 2001 there were 6877 foreign degree students in all the Finnish universities, but as many as 17634 in 2011. (Statistics Finland).

In lower level education, number of foreign students starting at Finnish vocational schools decreased from 2749 students in 2010 to 2397 in 2011. This means a total decrease of 12,8%, although the trend has been slightly increasing since year

2006, when the number of foreign students coming to study at Finnish vocational schools was 2059. The average study time in Finland was 3,5 weeks, and most of the students came from Germany, France, Russia, Estonia and Spain. When it comes to foreign teachers or other staff coming to Finnish vocational schools, their number saw an increase of 32,8% from 2010, being 2806 in 2011. Most of them came from Germany, Russia, Republic of Korea, Estonia and France. All in all, most of the students and teachers and other staff coming to Finnish vocational schools for any period of time, were mostly from European countries, 96% of students and 78,8% of staff. (Korkala 2011, 8-12.)

Students are legally entitled to student health care, despite their domicile; municipalities are obligated to provide these services. They are also in charge of providing the hired teaching staff with health care. (Finlex: Primary Health Care Act . Chapter 3. Section 14).

Tourists. According to Finnish Tourist Board (2012), there were 3,8 million foreign tourists coming to Finland in year 2000, but nearly 7,3 million in 2011. Most of them came from Russia, Sweden and Estonia. German, British, Norwegian and Japanese were also in top 7 nationalities represented in the cultural variety of tourists in Finland 2011. The municipalities are responsible for organising emergency care for everyone (Primary Health Care Act, 1972). According to the Council of the European Union (2011) citizens of European Union countries should receive health care in any member state. They should be reimbursed by the member state; the health care provider could also be paid directly by the patient's country of origin.

Minorities in Finland. Although a small nation, Finland has several minority groups, which originate from different backgrounds. Romans, Sami people and Finnish Swedish can be seen as multicultural groups for their do not share the same historical, linguistic or cultural background with the majority of the population. The right for health care services, and that way to patient education is equally same for them as any Finn. Citizens of Nordic countries should, if possible, be provided care in their own language or be given an access to services of an interpreter or a translator. Swedish speaking should receive care in Swedish

(Health Care Act. Section 6, 2010). Sámi people have the right to use Sámi language in public services (Sámi Language Act. Chapter 2, Section 4, 2003).

4 MULTICULTURAL PATIENT

Having a multicultural or cross cultural patient creates new challenges to a health care professional in patient education (Chachkes & Christ 1996, 13-21). For example gender issues, age, family background and how the patient defines health have an effect on the situation, where the patient should receive information on their health, or make decisions on treatment options and illness management.

Patient education with a multicultural patient is affected by not only the patient's cultural background, but also by how well the health care provider understands the cultural differences between them. It is not always remembered, that also the health care provider comes from a certain cultural background, and that that effects their own views. That background is equally as unique as that of the patient's. It is not justified to force the patient emerge culturally with the nurse or doctor's culture, its values, beliefs and traditions. (Chachkes et al. 1996, 13-21.) According to Josipovic (2000, 146-152), nurses say that it is crucial to understand the culture of a certain group, but it is not imperative to know everything about it; that would be impractical. However, too little knowledge could lead to wrong assumptions of the culture and causing damage from both perspectives; that of the nurse's and the patient's.

Patients from different cultural backgrounds are not just a part of that culture and society but need to be seen as individuals, too. They have their own personalities, temperaments and experiences. Any cultural group is not homogeneous, but even inside the group there are smaller subgroups with their own habits and traditions. Social class the patient belongs to may even have greater of an effect on them than the cultural background inside the group. Two people may share the same native language, but come from different cultural groups or subgroups. The health care provider needs to understand all these aspects in order to provide care and education that responds patient's needs the best. (Chachkes et al. 1996, 13-21.)

According to Chachkes and al. (1996, 13-21), gender issues and sex related taboos have an effect on patient's idea of health. In some societies, carrying out sex education may become difficult because of them. Similarly, in patient education it does make a difference, how health and expressing illness in a certain

culture are viewed. Illness may be perceived as “God’s will.” Some cultures only accept complaints about physical symptoms, but do not recognize mental health as a part of person’s well-being. Mental problems may be seen as shameful, or downright non-existing. The way people seek help from professionals varies between cultures; it may be seen as loosing face or, on the other hand, as an advisable thing to do. The healthcare professional needs to be able to combine the patient’s values, traditions and beliefs with the knowledge and recommendations necessary to help the patient to get better.

Good communication between the health care provider and patient is needed in patient education. It has many aspects, and requires good skills in cross-cultural communication from the professional. Communication should be ongoing, and long-term. It is not always verbal, but has also non-verbal forms. Gestures, eye-contact and touch differ between ethnic and cultural societies. (Chachkes et al. 1996, 13-21.) A language barrier may also cause problems in communication between the patient and healthcare provider. According to Kale and Syed (2010, 187-191), a hectic work may cause healthcare providers neglect the usage of professional interpreters. It may also be difficult to evaluate the patient’s language skills, when one does not have adequate training or resources to do so. A good knowledge base and awareness is needed to improve good communication despite the language barrier. Josipovic (2000, 146-152) mentions that nurses find it imperative to share similar language and culture with the patient. This is to ensure that no hidden meaning in language would disturb the communication.

Cultures have their own strengths, which should be identified and respected. Trust and good communication can be built by letting the patient express these differences and follow their traditions. However, beliefs which are harmful to the patient ought to be disagreed in a sensitive manner. A bilingual or bicultural co-worker may help in patient education with a patient coming from the same cultural group. In that case it should be noted that the co-worker may also share views and ideas typical to their group, but not in line with the public idea of good health care. (Chachkes et al. 1996, 13-21.)

5 THE AIM AND GOALS OF THE THESIS

The aim of the thesis is to find out what features a good patient education material should have, especially written material, and what should a nurse or any health care professional take into consideration when the material is targeted to multicultural patients. It concentrates on, however a small or big part it may be in the field of patient education, on written materials, especially the printed ones.

The objective of the work is to compose a check-list introducing features and properties a good written patient education material should have, and how to make the material useful for both the patient and the healthcare professional using it. It will be discussed how the information gathered could be of practical use for nurses in their clinical work. Also, suggestions are made for later research topics.

The research questions are:

1. What is good written patient education material like?
2. What special features should patient education have when targeted to multicultural patients?

6 SYSTEMATIC LITERATURE REVIEW AS RESEARCH METHOD

6.1 What is a systematic literature review?

Systematic literature review is literally a method for systematically browsing through and reviewing literature concerning certain topic. It can be used for either searching background information for an original study, or to form a study of its own. It is a method for drawing together information from several sources, and summarizing it. Using the method, it is possible to compare pieces of information collected from several sources, and see them in a new context as a whole, instead of looking at a small piece of a big picture (Aveyard 2010, 5-6). Kääriäinen and Lahtinen (2006, 37-45) describe the method as a process building up cumulatively. It means each phase has been documented carefully, and is based on the previous one.

Using a systematic literature review as a method aims at three things (Mäkelä, Varonen & Teperi (1996, 1999-2006); to minimize bias caused by cherry-picking the data; to ensure equal weight for each separate piece of literature and by combining information to effectively make it useful in practice. However, it may be very challenging to a novice researcher, and requires thorough studying of the method. Mäkelä et al. (1996, 1999-2006) also suggest that by using systematic literature reviews and implementing the results, it is possible to encourage evidence based practice in health care.

6.2 Phases of a systematic review of literature

According to Kääriäinen et al. (2006, 37-45), research process in systematic literature review consists of six phases; planning, developing a research question, searching for literature, choosing literature, evaluating the quality of literature and analyzing presented data.

Planning. In the planning phase, the research process is planned and described. It is important to explain thoroughly all the phases, for the process has to be

transparent and possible to be repeated later (Kääriäinen & al. 2006, 37-45). The researcher should identify the target audience and justification of the study. It is also important to see if a literature review has already been carried out on the same or similar topic. When these are clear to the researcher, it is far easier to move to the next phase.

The plan for this bachelor's thesis was done in September to October 2012. Carrying out the study followed the original plan in most parts; however the search for literature had to be modified in a later stage to better meet the limitations in resources. Similar studies using literature review have been done before, but none of them were found that specialized in written patient education materials for multicultural patients. To avoid doing something that has been done before, the literature review was carried out looking for an answer t two research questions, and combining the findings to serve a practical purpose. However, it was also acknowledged that there is a chance of a similar study been carried out earlier.

Developing a research question. In this phase, the researcher limits the subject of the study, and develops an exact research question. There are several different ways to limit the topic; for example, it can be based on the target group, health group, target audience or intervention. (Mäkelä & al. 1996, 1999-2006.) The question sets an aim, which is to find an answer to a certain question. There can be one or more questions. Careful planning of the questions is crucial, for they cannot be changed during the research process. Otherwise, the whole process has to be started from beginning. (Kääriäinen & al. 2006, 37-45.)

The research questions were formed in two phases. The first, more general question was formed to lay basis for the second question, which in turn was to supplement the first one. The questions were formed so, that not only were they specific and target group specific, but also simple enough to leave space for a thorough research.

Search for literature. Mäkelä et al. (1996, 1999-2006) describe four different ways to search for literature. *Databases* can be used in the search, but they may not cover all the relevant literature. For that reason, the search should be complemented with *reference search*, *manual search* and so called "*grey*

literature". References are picked form the bibliographies of the papers chosen in the search process, and then browsed by the title of the article. The ones suitable for the study are then looked for and added to the review. Manual search means that articles in certain journal or journals are being manually looked for. The titles of the journals are picked during the database search, if they seem to contain a significant number of good quality articles. Studies not yet published, or officials' reports and other such material which does not fill the criteria for being an original, published study, can be called grey literature. It may contain valuable information, but is a lot more difficult to access than original study reports.

Publication bias means that certain types of researches and their results are published more easily than others (Mäkelä & al. 1996, 1999-2006). For example, studies showing positive results may be published but the ones with negative results left unpublished (Easterbrook, Berlin & Gopalan. 1991, 867-872; According to Mäkelä and al. (1996, 1999-2006); it is not dependent on the scientific qualities of the study but merely the publishing reasons. To avoid this, it is suggested to search for all kinds of literature from different sources, including reference lists and grey literature.

If there are more than one research question, more than one study should be carried out. The search needs to be comprehensive, and requires good skills in using the selected databases. The search words need to be selected carefully, and the search done in as many as possible languages in order to avoid *language bias*. (Kääriäinen & al. 2006, 37-45.)

Due to the nature of the bachelor's thesis process, the study was carried out by only one person. Although it did set its limitations, it did not prevent a thorough and systematic search for literature. However, having more than one person searching for and evaluating the literature would have been time saving and more efficient. It would also have minimized the possibility of unintended bias. Language bias was unavoidable, for the search was limited to only two languages, English and Finnish.

Choosing literature. In systematic literature review, two researchers should do the search for and choose literature independently to avoid bias based on

researcher's subjective opinions and thoughts (Kääriäinen & al. 2006, 37-45). The selection should be systematic and based on the chosen exclusion and inclusion criteria. The number of items chosen and left out should be documented and presented in a table, with the reasons why the items were included or excluded. Mäkelä et al. (1996, 1999-2000) remind, that there might also be too much or too little material found. If so, the researcher has to decide, if they should change the approach to the study, make the inclusion criteria of material stricter, or maybe settle with noting the situation and documenting it.

The exclusion and inclusion criteria for literature were set in the planning phase, and did not change during the process. However, some details had to be modified in the process. The number of items found in each search was documented, and the reasons for inclusion and exclusion mentioned, yet not individually for each excluded item, but rather on general level in one chapter. All the reasons for exclusion were mentioned there, but no individual items were mentioned with each reason. For example, several papers could not be included because they were not original study reports, but the titles and authors of each paper were not mentioned.

Evaluating quality of literature. The research question and purpose define what is understood as a good quality literature in a certain research, and these criteria may evolve during the research process (Jones & Evans. 2000, 66-71; Khan, Kunz, Kleijnen & Antes. 2003; according to Kääriäinen & al. 2006, 37-45). The research must be valid by its content but also by the reliability of the method and the results (Mäkelä & al. 1996, 1999-2000). The material used has to be of same quality, or else the result of the review may not be truthful.

Several different methods were used in the literature chosen. It was challenging, if not impossible for a novice researcher fully see which type of research was of good quality. The main criterion used to evaluate the quality of the papers was whether they were original study reports or not. The content had to be relevant to the study subject, and presented in a clear way.

Analyzing. When carrying out a literature review to conduct a preliminary research for a larger study, the method helps to limit and specify the subject. By

analysing previous studies, it is easier to avoid unnecessary work, and increase the productivity of research (Mäkelä & al. 1996, 1999-2006). There are several methods, which can be used for analysing the data at hand.

Inductive content analysis was used in this study paper. The analysing process followed the main guidelines for carrying out an inductive content analysis in literature review, and is explained in more details later.

Presenting results. Kääriäinen et. al. (2006, 37-45) remind that the final size, or extend of the data is seen only after choosing literature and evaluating the quality of the chosen items. The data should then be analysed and presented in a way that all the results are systematically exposed to the reader of the study, in conjunction with explaining all phases of the search process (Egger, Dickersin & Smith, 2001, 43-68; according to Kääriäinen et. al. 2006, 37-45).

The phases of the bachelor's thesis were explained in detail throughout the process, combined with suitable theory and reasoning behind making certain choices. The results of the search process and data analysis were presented in ways easy to understand by the reader. Any limitation to the study was also introduced and explained.

6.3 Inductive content analysis

Inductive content analysis was used as data analysing method in this thesis, by analysing the data and forming concepts based on individual units in it. According to Kyngäs and Vanhanen (1998, 3-12), content analysis aims to simplify and summarize a phenomenon, as well as to conceptualize it. Besides in an inductive way, content analysis can also be done deductively.

In content analysis, one can analyse content of documents in a systematic and objective way by grouping messages with similar meaning under same category, and also use it as a method to better understand communication (Cavanagh, 1997, 5-16; according to Kyngäs et. al., 1998, 3-12). Communication in content analysis stems from asking the material questions; who is saying, to whom, what, how and with what consequences (Berelson, 1952; Pietilä, 1973; Weber, 1985;

Polit et. Hungler, 1995; according to Kyngäs et. al, 1998, 3-12). Part of the process is to ask, how many times a certain concept appears in the text (Tesch, R. 1990; according to Kyngäs et. al., 1998., 3-12).

Content analysis does not follow strict rules, but merely guidelines on how to proceed in the process, which may be done in an inductive or deductive way (Krippendorff 1980; Catanzaro, 1988; Sandelowski 1993, 1995; according to Kyngäs et. al., 1998, 3-12). In the inductive approach, the first step is to pick a unit of analysis, which could be for example a word, number, sentence or idea, based on the data and research question (Robson, 1993, Morse, 1994, Polit et. al., Burns et. Grove, 1997; According to Kyngäs et. al., 1998, 3-12). After choosing the unit, the material is read thoroughly several times. While reading, the researcher asks the text questions, such as what is happening here, why and to whom (Dey, 1993; According to Kyngäs et. al., 1998, 3-12)?

Analysing the content in an inductive way means to analyse it from inside to out, from smaller pieces to larger concepts. Whilst reading the text, the researcher asks it the research question, and writes down in the margins the things which answer it. These units, or expressions, are then collected into list, from which sub-categories are formed. (Berelson, 1952; Weber, 1985; Marshall et. Rossman 1995.; according to Kyngäs et. al., 1998, 3-12.) This process of writing appropriate expressions in the text while reading it is called *open coding* (Elo et. Kyngäs, 2008, 107-115). The items on the list formed are simplified ways to express the original expressions, and the ones common in idea or concept are put under same sub-categories, which are then named in order to express the idea, concept or thought in common to all the items under the same category. This phase is based largely on the researcher's subjective interpretation (Dey, 1993; According to Kyngäs et. al, 1998).

The next phase is abstracting the data by combining categories into generic categories, and naming them, as well. According to Elo et. al. (2008, 107-115), this phase can be continued and new generic categories formed as far as needed. The result is finally a main category, which describes the phenomena under study.

The data analysis in this thesis began by reading the material, i.e. the articles found in the databases (Academic Search Elite, CINAHL and CINAHL with full text via EBSCO Host and PubMed). The units of analysis used were *sentence* and *part of a sentence.* The analysis process is explained later in more details in chapter 9, Analysing data.

7 DATA COLLECTING PROCESS

7.1 Databases used for collecting the material

The data collecting was focused on the databases accessible via Seinäjoki University of Applied Sciences' remote access to electronic sources. The choice was made due to limited time resources, and easy access with the university's student username and password. Database selection was based on certain criteria, which initially aimed to include all the possible material related to the topic of the thesis: a database had to include articles related to nursing science or practice, which in turn had to have been published in an academic journal; a database could be multidisciplinary, or concentrate merely on nursing and it could include both full text articles, as well as references to articles. Both English and Finnish languages were used as search languages in all the databases used.

The selection process for choosing the best databases was simple: first any database not related to nursing was excluded from the list. Next, the keywords used in the data search phase were inserted in the search field, after which the search results were quickly browsed to analyse their quality. This meant finding at least one scientific article related to the topic, and seemingly useful to the study. Any database offering none or poor quality results were excluded. Inclusion meant that the database showed potential in being useful, but would be excluded if no relevant literature were to be found later during the data search. Database containing references to same, possibly useful articles as any other database, was not an exclusion criterion. The duplicates were removed in the data search and analyses phase.

In the final phase of database selection, only literature found in four databases was used; *CINAHL, CINAHL with full text* and *Academic Search Elite* were accessed simultaneously using *EBSCO Host database*, and *PubMed* as its own search. The main criterion for excluding so many other databases was limited time. They had already been searched for literature, and the quality of the material was mainly found unsuitable. Also, the few good items were found as duplicates in the four databases mentioned above.

There were also some practical limitations to the research. Due to limited finances and time, only full text articles were searched and studied. With less limited resources, promising articles with only abstracts available would have been included, making the search more comprehensive. In that case, the articles would have been accessed from paid sources.

Since there were two research questions, two searches were carried out in all databases. Both searches were also done by using two sets of English key words or terms. These searches were then repeated using the same keywords in Finnish.

7.2 Keywords used in the search process

English words. Keywords used in the search process were *patient* and *education.* The word *client* was also used in order to ensure a bigger variety of literature found, and the word *teaching*, for the same reason, was used in conjunction with patient. *Material** was used as a keyword to focus on literature suitable for the research's purposes.

In the second search, the keywords were *patient education* and *multicultural patient,* to answer the second research question.

Finnish words. As Finnish databases were searched as well, and Finnish articles were hoped to be included in the final data under studying, it was important to ensure the similarity between the Finnish keywords and the English ones being used. The word *potilas* was used to replace the word *patient*. Similarly the word *asiakas* was subsisted for English word *client*. In Finnish language patient usually refers to a person using health care services, and client to a person using social services, and this difference is recognized even in the legislation (cf. Finlex: 17.8.1992/785 Laki potilaan asemasta ja oikeuksista; Finlex: 22.9.2000/812 Laki sosiaalihuollon asiakkaan asemasta ja oikeuksista.. Note: No English translations available). However, it is not unusual that the word *asiakas* is used in private health care sector, thus it was added in the search word list to ensure a more comprehensive search process. In Finnish, the term patient education can be

written as *potilasohjaus*, or *potilaan ohjaus*, and both the terms were used in the search process. The term *material** was replaced by *materiaali**.

To answer the second research question, the search was done with search words *potilaan ohjaus* and *monikultt*.*

7.3 Inclusion and exclusion criteria of the material

Table 1. Inclusion and exclusion criteria of literature

Inclusion criteria	**Exclusion criteria**
Original research only	Non-academic articles
Published literature only	Have not been published
Peer reviewed	Have not been peer reviewed
Published in year 2000 or later	Published before year 2000
Relevant to nursing practice and/ or health care or health promotion	Not related to nursing practice or health care or health promotion
Of written patient education material	Do not cover written/printed patient education material
Of print material	Of material published online
Literature published in English or Finnish	Literature not published in English or Finnish.
Full text only	No full text available free of charge
Of adult, multicultural patients in Western countries	Do not deal with adult, multicultural patients and do not apply to conditions in Western countries

The search for literature was done in two parts, aiming to answer both research questions individually. In the first phase, the inclusion and exclusion criteria

showed in Table 1. were all used, except the last one. To avoid bias or unreliable sources, only original studies were searched. The material had to be published, for unpublished material would likely not be scientifically reliable or possible to access within the timeframe given for the study. Peer review was important for ensuring the good quality and relevancy to the nursing profession. Limiting the search to literature published in 2000 or later aimed to ensure it was up-to-date. The focus of the material had to be on written or printed patient education material, for only that way it could help answering the research questions. The exclusion criterion *of material published online* was added to limit the research topic and help focus on a specific type of material. During the second phase, when aiming to answer the second research question, one more inclusion criterion was added. The second question focuses on adult, multicultural patients in Western countries, and that was used as an inclusion criterion as such. During the search process, only texts written in either English or Finnish were considered as sources due to language limitations.

Originally, the intention was to search within articles not found in full text, as well, but during the search it became obvious that handling the literature would be difficult with the limited time for the study. For this reason, instead of trying to access the articles with only abstract available, the idea was rejected. The inclusion criteria *full text only* was added to the list in the very beginning of the search process.

The search was done in certain databases mentioned above. The inclusion and exclusion criteria were inserted in the search field when possible. They were also used later when the final selection of literature was carried out by systematically going through the papers and handpicking the suitable ones. However, in this phase some inclusion and exclusion criteria were added or ignored, for the purpose of ensuring the inclusion of all the relevant, and exclusion of all the irrelevant material.

7.4 The systematic search process

The search was started by systematically going through the databases and inserting the keywords and inclusion and exclusion criteria in the search field aof a database. Different databases gave different options for selecting criteria, so as many as possible criteria were inserted in the search field, and hand picking done from within the material gotten as result. The most promising articles were printed off, and their reference information written on a separate list in order to help creating a bibliography later.

During the inclusion and exclusion phase, it became clear that a very careful reading of the articles was required in order to choose the most suitable ones. For example, some of the articles, based on the title, seemingly focused on written patient education material, but after reading the abstract it was noticed that they could explain merely which exact disease-specific details should be introduced when providing a patient group with written material. However, an item focusing on a specific disease was not an exclusion criterion as such, if the information found in it was generalizable enough for the purposes of the thesis. Some articles concentrated on online materials, and some were of studies carried out in Asia or Africa. The title did not always reveal the study or target group, which despite the early exclusion, could be children or elderly. Some papers were of written patient education material, but had to be left out because they focused more on the distribution and utilization degree of materials available. Interestingly, some articles which passed the early exclusion phase but did not seem to fill the inclusion criteria based on the title, included some relevant and general enough information focusing on the topic at hand. This meant that at least all the abstracts, and frequently the text as well as all the result items had to be read thoroughly. Later a lot of duplicates from previous searches started appearing in the search results, thus making the search easier, for they had already been evaluated and could simply be ignored.

Some of the articles found and used as data focused more on the specific needs of a patient group, whereas others discussed in more detail what written materials should include, and some concentrated on evaluating the reading abilities of a

patient group. All types of papers provided information suitable to answer the research questions of the thesis.

One significant problem with the data found, was that an outstanding number of the very promising search items, turned out be literature reviews or not study articles at all. They might include useful information to the study, but unfortunately had to be left out for they did not fulfil one of the most important inclusion criteria, *original research only*.

The search was done in the same databases twice in English and twice in Finnish. The second search was done to answer the second research question. To be able to find a comprehensive answer to the question how to make written patient education material suitable for multicultural patients, the search terms were not limited to written material, but rather to patient education with the target group in general. From this information, conclusions were then drawn towards applying the information to written materials. The data collected during the first search were also applied to making the answer complete. The reasoning for doing so was the very limited or non-existing search results focusing purely on written material for multicultural patients.

7.5 Data found as search result

EBSCO Host: Academic Search Elite, CINAHL, CINAHL With full text. EBSCO Host allows you to access several databases simultaneously. Here, it was used to access three databases related to nursing at once, making the search process faster and easier.

*Patient education AND material** was used as a search term. Any article not in full text and published before 2000 were excluded. Only peer reviewed, academic articles were included. The search was limited to *All adult, Middle aged: 45-64* and *Adult: 19-44*. After the initial exclusion, there were 653 articles left. The database allows you to exclude and include certain subjects by a Thesaurus term. Here, the following subjects were included, based on their relevance to the topic: *patient education; health education; teaching aids & devises; patients; nursing; health*

promotion; nurses; pamphlets; information resources; self-care, health; nurse & patient; decision making; preventive health services; health literacy; hospitals; patient compliance; patient satisfaction and *therapeutics.* There were 175 items found and gone through for the final exclusion and inclusion after that. Of them, 19 were chosen to be analysed more closely.

The search term *patient education* was then changed to *patient teaching*, while the term *material** was still used. Using the same exclusion and inclusion criteria as above, the result was 50 items found. The subjects of the articles were limited to: *patient education; teaching tools & devices; nurse & patient; health education; nurses; self-care, health; hospitals – admission and discharge; patients; problem solving; teaching methods; active learning; interpersonal communication* and *readability.* There were 27 articles left to be analysed for the quality of their content; 1 was seen good enough quality to be added to the collected data.

The term *patient education* was then switched to *client teaching*. *Material** was still used as a co-term. After inserting necessary exclusion criteria, year of publication, full text only, peer reviewed and published in academic journals, the number of items found was four. None of the items was found suitable. Last, teaching was changed back to education, but after inserting the inclusion criteria above, and adding the age limitations, the number of search results was one. That article did not provide useful information on the topic.

The second search was carried out to answer the second research question. The search criteria were the same as in the first search, but search words slightly different. The search terms *patient education AND multicultural patient were* used, and the search limited to cover only full articles published in academic journals in 2000 or later. They had to be peer reviewed and in PDF full text form. The search resulted in 52 items found in all three databases; 39 in Academic search Elite, 17 in CINAHL with full text and 1 in CINAHL. There was no need for further limitation of the results. After reading the articles, 8 of them were selected.

There were no items in Finnish available.

PubMed. *Patient education material OR Patient teaching material* were used as the first search phrases. The time of publication was limited to cover years from

2000 to 2012, the text availability to cover only free full text and abstract available, and the age to cover any age group from 19 years to middle aged. There were 2107 articles found. The search was limited further by including only articles published in nursing journals. After this, 69 articles were found and their abstracts read more carefully. There were 18 items to fit the inclusion criteria loosely based on the title and 5 of them were selected based on the content and availability in free PMC (Pub Med Central) form.

Using *client education material OR client teaching material* as search phrases, the search limited to those published in 2000 or later, searching only for articles published in nursing journals, and free full text available, the result was 52 items. The number did not change after adding the age factor, searching for articles concerning age groups from 19 to 64 years. Some of the articles were the same as in the first search. Of these 52 articles, none were selected, for the most suitable ones had already been selected during the previous search in the same database, or they had not been published in the free PMC format.

To answer the second research question, search terms *patient education AND multicultural patient* were used. After including only those available in free text form and published in 2000 or later, the result were 4 items found; 1 of them was excluded for it had been selected earlier in the same database, 2 were literature reviews, and 1 did not concern patient education; no article was picked for the study.

No articles in Finnish were found in the database to match the search terms.

In the end of the search process, there were 20 articles form EBSCO Host and 5 from PubMed to answer the first research question, and 8 from EBSCO and none from PubMed to answer the second research question. Altogether, there were 33 articles to be used as data for the research. During the first read-through of the material, 2 articles were removed for they were not original study reports, 4 did not concern written materials or contained no significant info about them, 1 had a study group of over 65 years old people and 1 was removed for other reasons. As a result, 23 articles were selected in the final data (See Figures 1. and 2.).

Two searches were done with different search terms in both EBSCO Host, as well as in PubMed. This process was repeated to answer both questions, resulting in all together four searches. The same process was carried out in Finnish, but no results were found, thus it was not showed in the figures 1. and 2.

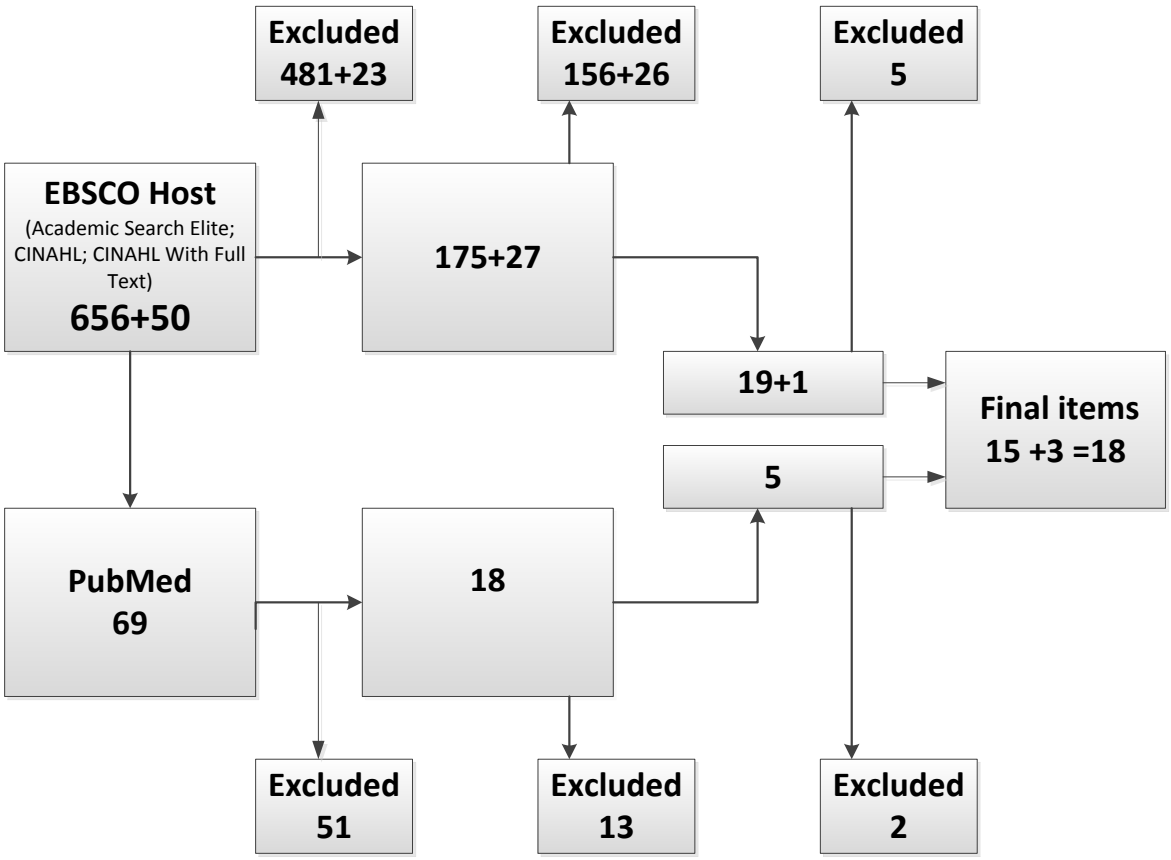

Figure 1. The inclusion and exclusion process of data to answer the first research question.

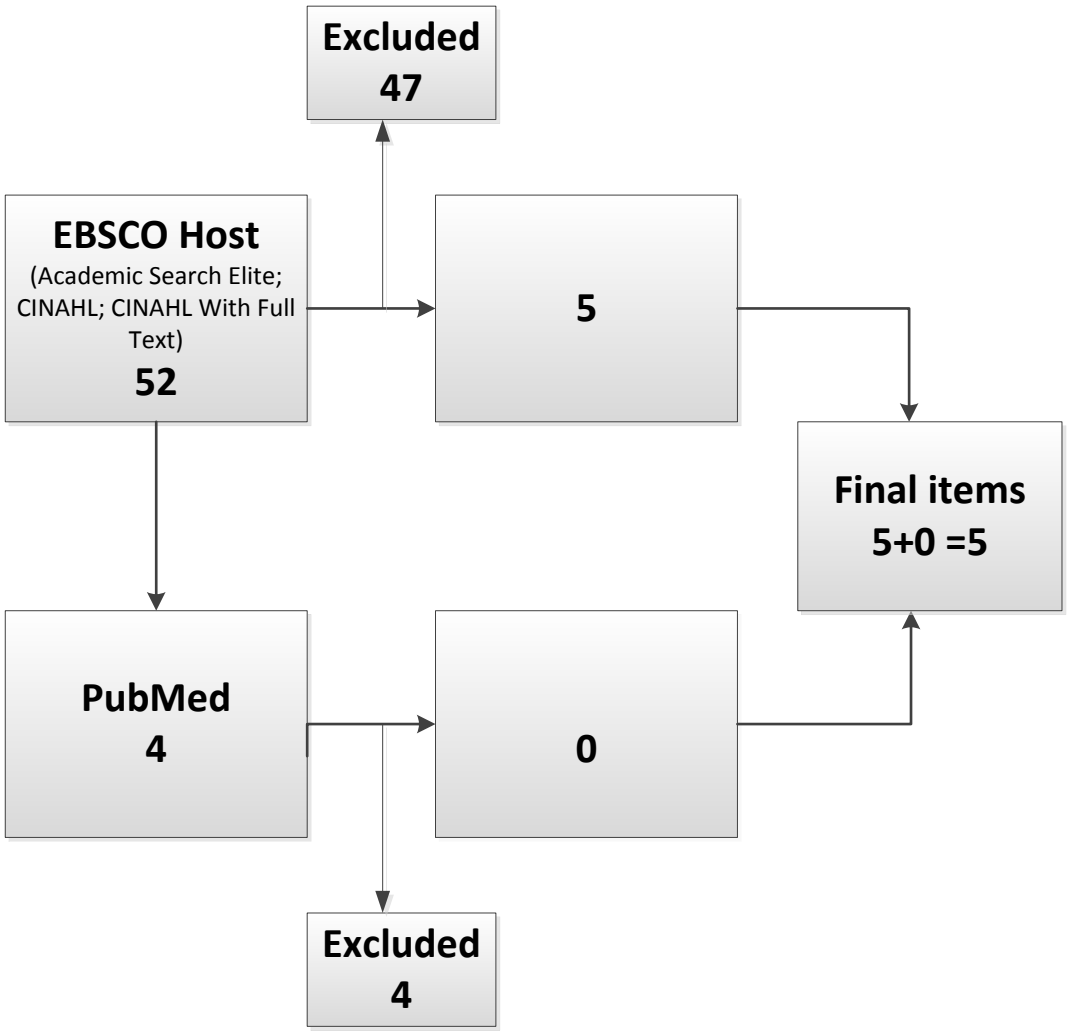

Figure 2. The inclusion and exclusion process of data to answer the second research question.

8 ANALYZING DATA

The selected articles were first carefully read through. After that, the relevant sentences and parts of sentences were highlighted in the text, and keywords used to simplify the message in them. The sentences and parts of sentences, as well as the simplifications extracted from them were then written into a Microsoft© Word© table. Next, the reduction was continued by forming subcategories from the simplified expressions. Subcategories concerning mainly educating a multicultural patient were highlighted to make the table more clear and easy to read. The subcategories were then, in turn, combined into main categories, which were the result of the data analysis process. (See: Appendix 3.) In the end there were 12 main categories organized under four themes to answer the first research question, and 3 to answer the second, but the great number was not seen as disadvantage. On the contrary, it was seen as a decent and comprehensive result for analysing such a large number of items.

9 RESULTS

During the reduction of data, certain themes stood out from within the text. They covered areas concerning *quality of information, layout and appearance, comprehensiveness,* and *usability* of written patient education material, divided into 12 main categories. In teaching multicultural patients, general cultural sensitivity and using appropriate languages were the themes mentioned in several studies. These themes could be categorized into three groups, or main categories; *learning, accepting* and *understanding* the other culture, its people, traditions and beliefs.

9.1 Components of a good written patient education material

The components of good written patient education material can be described under four themes.

9.1.1 Quality of information

Ensuring the good quality of information. Good quality is important in patient education materials, and is composed of several different aspects. Singh (2003, 867-870) points out that it should be not only relevant to the audience, but also readable and understandable to them. The information in good materials is valid at the time it is read, and is based on clinical guidelines (Moumjid, Morelle, Carrère, Bachelot, Mignotte, et Brémond, 2003, 128-139). The information should be composed and checked by professionals (e.g. Perkins, 2000, 41-49), and be based on scientific facts (e.g. Godolphin, Towle et McKendry, 2001, 235-242) and guidelines (Moumjid et al. 2003, 128-139). Wilson, Mood and Nordstrom (2003, 128-139) mention that the information ought to be relevant and appropriate to the user but also attractive. The name of the producer of the material should be available, (Perkins, 2000, 41-49). Strachan, de Laat, Carroll, Schwartz, Vaandering, Toor, and Arthur (2012, 495-504) point out how important it is to

ensure that the information is not confused with commercial content, e.g. advertising or promoting certain product.

Offering relevant information. Too much information may confuse the patient. There should be an overview concerning the topic of the material (e.g. Frosch, Légaré, et Mangione, 2008, 490-496) There might also be a need to offer supplemental information in addition to the information that is acutely necessary to the patient (e.g. Moumjid et al. 2003, 128-139). The information offered in the written materials should be up-to-date. It needs to be current (Strachan et al. 2012, 495-504) and relevant to the patient at the time they are using the material (Moumjid et al. 2003, 128-139).

9.1.2 Layout and appearance

Using relevant pictures. Pictures are an important part of written patient education materials. They should be relevant to the topic (e.g. Moumjid et al. 2003, 128-139; Lake, Speed, Brookes, Heaven, Adamson, Moynihan, Corbett & McColl, 2007, 3-8) and aid in delivering the message (Wilson et al. 2010, 774-781). Contrast between the background and pictures, using an image on the front cover of a print material and using visual cues could be considered (Strachan et al. 2012, 495-504).

Highlighting. Different areas and topics in the pamphlets and other print material can be highlighted (Moumjid et al. 2003, 128-139), and it can be done in different ways. Bullet points can be used (e.g. Lake et al. 2007, 3-8) to separate sentences or themes. Moumjid et al. (2003, 128-139) mention using different fonts for headings and subtitles, and organizing text into sections. Strachan et al. (2012, 495-504) view using subheading as a way to organize the content of the materials, and Wilson et al. (2010, 774-781) mention using different colours. Leaving empty spaces and avoiding extra content help the reader so that they will not become exhausted by the material (Strachan et al. 2012, 495-504). Light and pastel colours can be used in the materials (Wilson et al. 2010, 774-781; Moumjid et al. 2003) although using too much graphic and colours may lessen the legibility of the information (Perkins 2000, 41-49).

Using a personal style. A personal style in written materials does not confuse or bother the reader (Moumjid et al. 2003, 128-139). There are several ways to personalize materials. Different colours can be used, and pictures added. The content should be flexible (Perkins 2000, 41-49). Using illustrations was mentioned in several studies, but they do not necessarily have to be just photographs, but for example sketches (Wilson et al. 2010, 774-781), diagrams (Gustafsson, Hodge, Robinson, McKenna et Bower 2010, 190-196) or computer illustrations (Demir, Ozsaker & Ilce 2008, 259-265). Using different paper sizes and formats could also make the style more personal; for example making a small brochure (Moumjid et al. 2003, 128-139), or an A5 booklet, separating information on more than one paper, (Lake et al. 2007, 3-8) or printing on both sides of an A4 sized paper (Desplenter, Laekeman, Demyttenaere & Simoens 2009, 645-655). Pastel colours (Moumjid et 2003, 128-139) could also be used.

9.1.3 Comprehension

Summarizing. Perkins (2000, 41-49) mentions summarizing as a part of a good written material, and Adkins, Elkins and Singh (2001a, 279-285) giving a brief overview of the topic at hand. This could also be seen as a way to increase patient comprehension on the material, for it may help the patient to reread what he needs to learn.

Keeping it simple and explaining. Simplicity was mentioned in several of the studies (e.g. El-Ibiary et Youmans, 2007, 58-62). Moumjid et al. (2003, 128-139), and Strachan et al. (2012, 495-504), among other studies bring up explaining the terminology in the materials. Strachan et al. (2012, 495-504) also say that explaining the facts clearly may aid the patient to interpret the materials better. Adkins et Singh (2001b, 1-8) note that the language in well written materials is free of special jargon.

Using alternative teaching methods. Demonstrating the new skill and letting the patient to demonstrate it back, as well delivering the information verbally

(Gustafsson et al. 2010, 190-196) could be used in combination with written materials in patient education. According to Johansson, Katajisto and Salanterä (2010, 2980-2988) written material can in some situations be enough, if it is made so that it covers the topic extensively enough and includes enough relevant information. Johansson et al. (2010, 2980-2988) also add telephone counselling to the list of complementary teaching methods.

Making it readable and understandable. Several studies highlight the importance of comprehensiveness of the material targeted to any patient groups. The text in good materials is written at a level that is easy to read to the patient, and the comprehensibility is checked by professionals, as well as how medical terminology affects the reading level (Sand-Jecklin et al. 2007, 119-129); although medical terminology should mostly be avoided, it may not disturb the reader if they are familiar with the topic. Singh (2003, 867-870) points out that reading level, (the level of how easy or difficult it is to read the text, based on for example sentence length and syllable count of words), is not necessarily the same as how well the text is understood. Desplenter et al. (2009, 645-655) talk about package leaflets as a source of information in a written form, and how important it is ensure the patient understands the way they are written. Materials should also be written in a way that aids the patient to follow the instructions properly (El-Ibiary et al. 2007, 58-63). Big enough font size (e.g. Wilson et al. 2010, 774-781) and using enough white space (e.g. Strachan et al. 2012, 495-504) were seen as good qualities in written material.

9.1.4 Usability

Making it target group specific. In addition to using terminology the group is familiar with (Lake et al. 2007, 3-8), it is also useful to test the final material with the end users (Perkins 2000, 41-49; Grace, Evindar, Brooks, Jaglal, Abramson et Nolan, 2005, 23-27). The language in materials should be understood by the specific target group, and take into account the patient group's experience. Patients could also be given a choice of materials they wish to use. (Wilson et al. 2010, 774-781.) Several studies point out that materials are formed to be specific

to a certain group based on for example gender or age. Strachan et al. (2012, 495-504) mention documents containing information relevant to their target group. The need to evaluate the target group's level of knowledge was brought up for example by Gustafsson et al. (2010, 190-196) who say that the information given should be based on the patient's information needs as well as personal situation.

Motivating the patient. Motivating the patient is an essential part of patient education, and it can be carried out via written materials. Gustafsson et al. (2010, 190-196) say that motivation level of the patient may even have an effect on the appearance and context of the material. An interview may be used in addition to providing the patient with written materials (Grace et al. 2005, 23-27). The material should also be freely available (Adkins et al. 2001a, 279-285).

Encouraging questions and independency. Written material should aim to give the patient information about options on treatment, medication and self-care, while being realistic about them (e.g. Moumjid et al. 2003, 128-139; Sand–Jecklin 2007, 199-129; Strachan et al. 2012, 495-504; Allen LaPointe, Pappas, Deverka et Anstrom, 2007, 98-101). All aspects and possible outcomes of treatment should be mentioned, so that the patient can make informed decisions and practice independent thinking; the material should not aim to lead the patient's thinking and decision making to a certain direction (Strachan et al. 2012, 495-504). The material should also empower the patient (Lake et al. 2007, 3-8). Good material offers advices on and educates the patient about healthy life style (e.g. Demir et al. 2008, 259-265; Lake et al. 2007, 3-8; Perkins 2000, 41-49). The material may ask questions itself, and provide answers to them (Desplenter et al. 2009, 645-655). Material could also be interactive, and allow the patient to insert their personal information (Lake et al. 2007, 3-8), to be compared with the official guidelines. Contact information for more information should be added to the text (Perkins 2000, 41-49).

9.2 Special features in patient education with a multicultural patient

Although sharing same components, teaching multicultural patients does have some special features when compared to patient education with people

representing the majority. These features can be divided into three main categories. They may not be seen as separate areas, but more as intertwined themes which complement and support each other. They do not merely concern written materials, but all aspects of patient education. Although the literature read for the analysis did concern very different patient groups, they were all similar in a sense that they considered what could be seen as good patient education or way to deliver a message to the multicultural patient.

9.2.1 Learning

In order to provide good patient education, a nurse, or any health care professional needs to learn about their target group. Attention needs to be paid to the patient's ethnical background and learning about their self-care habits; they may specific to their culture (Chou, Dodd, Abrams & Padilla 2007,1162-1167). The nurse needs to know the culture and language of the patient group, in order to enhance patient comprehension on the materials (Gordon, Caicedob, Landera, Reddya & Abecassish 2010, 2701-2707) and be able to offer culturally sensitive information (Chou et al. 2007, 1162-1167). A certain patient group may be considered as an at-risk-group due to their ethnical background, and patient education should be directed especially to these groups (Houston, Scarinci, Person & Greene, 2005, 1056-1061).

9.2.2 Understanding

The cultural differences need to be emphasized in nursing care (Pinikahana, Manias, Pharm & Happell 2002, 149-154). The patient may have different beliefs and values than the nurse, which they are not willing to change, or they may not accept the Western idea of health. Patients may have misconceptions which are shared by an entire nation, believe in myths or not trust authorities. (Drummond, Mizan, & Brock 2011, 190-205.) Sometimes the treatment and diagnosis of a health problem may be different; the nurse needs skills to understand the cultural diversity (Pinikahana, et al. 2002, 149-154). A Chinese patient may first seek help

from traditional Chinese herbal remedies but not tell about it to their health care provider (Chou et al. 2007, 1162-1167) or a patient from an African culture may prefer having separate teaching groups for men and women (Drummond et al. 2011, 190-205). The nurse should be aware of these differences in order to ensure effective care and patient education. The relationship between the multicultural patient and healthcare professional should be based on a partnership, and the care should be flexible (Pinikahana et al. 2002, 149-154).

9.2.3 Communicating

Communication plays an important role in supporting effective self-care management with the multicultural patient (e.g. Chou et al. 2007, 1162-1167). The information should be delivered to the multicultural patient so that even a diverse target group may understand it; their native language, and if needed, alternative teaching methods should be used (Gordon et al. 2010, 2701-2707). The message should be worded in a way that is sensitive to the culture of the patient group (Drummond et al. 2011, 190-205) and match their oral culture. Good information is relevant to the multicultural target group (Strachan et al. 2012, 495-504), and encourages group discussion (Drummond et al. 2011, 190-205). In order to avoid misconceptions in communication, one needs to keep in mind that images and meaning of text are seen in a cultural and historical context by the patient (Strachan et al. 2012, 495-504) and they may also have certain attitudes and deficits in knowledge (Drummond et al. 2011, 190-205).

Alternative methods to deliver the message may be used: peer education (Drummond et al. 2011, 190-205), using an interpreter or bilingual and bicultural staff, and offering face-to-face or phone counseling (Gordon et al. 2010, 2701-2707).

10 CONCLUSIONS AND DISCUSSION ON THE TOPIC

The results of the study and how to interpret and implement them are flexible. This chapter introduces a few aspects to them.

10.1 Reflecting the results

The results of the review of the literature are in many parts following the findings in the background material collected for the study. The background material used was not as specific or extended in some areas compared to the findings in the literature, but provided useful comparison and something to reflect the findings against. It was also useful when making decisions on which information would be suitable and useful to be included in the final product of the thesis. The final product, check-list for health care professionals to use, got its content from this reflection, but also personal preferences and ideas of the author.

Good *quality of information* provided in any form of patient education was highlighted in both background material and the data collected in the databases. Both sources acknowledged the importance of providing the necessary information, but also additional knowledge when needed. Any additional information should only be offered once the need for acute knowledge has been removed. The results of the literature review also gave more detailed instructions for ensuring the good quality of the information; the background material was less specific in the area. The review also noted that the material should not be confusing or misleading; this aspect was also brought up in the material concerning ethics in patient education.

Suggestions for the *layout and appearance* were made in the background material, but more so in the literature found during the review. It was mentioned in both sources that using pictures as a tool would aid delivering the message. The findings in the review talked more about adding the pictures in the written material, whereas in the background material, visual aids, including pictures, were also mentioned as a separate form of teaching. The literature review gave several suggestions on what to consider in an educational print material; size, format,

illustrations, colour, and so on. From this information, the conclusion was drawn that material should look original and have a personal style, without making it confusing to read and understand. Surprisingly few sources mentioned exact details about a good layout of materials; it would had been interesting to learn more about such things as width of margins, preferred colour schemes, recommended fonts and so on. These aspects were taken into consideration as much as possible while designing the layout of the pamphlet. It was also concluded that print material could take other than just a written form, as well as that written material could be other than just printed, for example online publication. However, suggestions made for composing good written material were decided to focus on written print materials.

Understanding the material and information provided in it was a big theme in several studies read for the review. In the results of the study, it was summarized under the category *comprehension*. Terminology in the materials, according to both background and study material should be explained when necessary. It was noted that the health care provider should be familiar with their target group, and taking into consideration what they already know. The educator should also ensure that the patient or patient group understands the information provided; this was mentioned shortly in both sources, background information and reviewed literature.

Some aspects in patient education and composing written materials were left with little or no notion. Empowerment, even though being discussed a lot in the nursing field, was not mentioned in too many studies or background materials. Originally, it was supposed to be a part of the check-list, but was decided to be left out. Similarly, health literacy was one theme discussed in the literature found in the search. The term was not mentioned in the results of the analysis, for it falls into the category of comprehension, and the health care provider's responsibility to ensure the patient understands the information.

Three themes of educating multicultural patient stood out in the literature found in the databases, and were supported by the background material. *Learning, understanding* and *communicating* were approached from different points of view. It must however be noted, that if the study had been carried out by a different

person, or there had been several researchers, these categories might have been named differently, divided into more or fewer, or approached entirely differently.

The three themes cover different aspects to providing nursing care. Although they may sound simple, some problems may be faced when implementing them to practice. For example, a nurse may not have time for getting to know his or her target patient group; the situation could happen in an emergency room (ER) or intensive care unit (ICU). It might also be challenging to understand patient's reasoning for a behaviour which seemingly is damaging their health. More so, is there a nurse who would have time to learn a new language to provide education to a group of patients? However, the three themes are more general in nature than purely strict rules and should be implemented according to what a situation requires.

10.2 Ethics and limitations to the study

In this thesis, only good quality literature was chosen to be reviewed. However, the author has no formal training in doing research, so it cannot be guaranteed that no significant sources were left out. The resources were limited, both financially and time-wise. For that reason, no other literature than which could be accessed for free, were used. Also, small timeframe laid limitations to the extent of the search for literature. Only literature written either in English or Finnish was studied, thus a chance of language bias was present during the search process. There was only one person doing the study, so the number of databases searched had to be limited. This may also have led to bias, for only one person judged the usability of all the material found and chosen for the study, without anyone providing differing opinions.

Ethics was considered and only original studies used as sources for the research. Original authors were referred to, as well as mentioned in the bibliography accordingly. There were no risks of revealing single patients' identity, for they had already been hid in the literature.

10.3 Practical implementations of the study

The check-list (Appendix 1) composed as a result of the literature analysis and the findings can be used as a guideline when designing written patient education material, especially when it is targeted to multicultural patients. The check list may also be used as a practical tool when the aim is to produce general information material for any adult patient group. It does not concentrate on any specific field of health care, but serves its purpose in many settings.

The content of the check-list was chosen and formed based on the results of the literature review and background information gathered in other published literature. The answers to the two research questions were combined as to form instructions on writing material for multicultural patients. The layout was designed based on the few recommendations found in the materials, but also based on the author's own personal preferences.

The check-list's main colour, pink ffcdd9, was chosen based on the Manchester Colour Wheel (Caruthers, Morris, Tarrier et Whorwell, 2010). In their study, it was evaluated by the study group mainly as a positive color (n=20), and had a low score for negativity (n=4). The color scheme used in the pamphlet was based on a color analysis conducted at www.colorschemedesigner.com, Different fonts were used for the main heading (Coolvetica) and the text (Bodoni MT). The fonts were obtained at www.dafont.com. The titles were written in different color as the text, and were capitalized. The pictures were downloaded from eu.fotolia.com via a one month free trial, and are royalty free. This means they can be used for free in the type of written material composed in this thesis, even when the material is for public use. However, it is not legal for other users to use them in any other context or copy them, without purchasing them from the photo service provider first.

The check-list is freely available to use for any healthcare professional or institution. It will be offered to be used in Seinäjoki Central Hospital, and can be ordered in a pdf form from the author, both in English and Finnish (Appendix 1; Appendix 2.) Feedback is also welcome.

10.4 Testing the material

The check-lists, both English and Finnish versions, were peer evaluated by a group of Finnish nursing and public health nursing students (n=6). The group was asked to evaluate the appearance, content and usability of the material. Feedback was asked in a verbal form. No specific scales or answer formulas were given to the testers The test group made suggestions on how to improve the material, and changes were then made in the final version, based on their suggestions.

The group evaluated the appearance of the material good. It was seen as clear and original, and no suggestions concerning changing it were made. The color was noted as personal, and making the material stand out from other similar ones.

The content and information given was mainly evaluated as good. Some suggestions were made concerning the wording; these were about misspellings, punctuation and using bullet points in the Finnish version of the check-list. Also, attention was paid to the wording of the main heading of the Finnish version, one of the evaluators suggested it to be changed to express the fact there are more than one patient the material is written for. The title was not changed, for other evaluators viewed it as expressing the main idea of the material. Also, it was suggested that changes would be made in fifth sub heading in the Finnish check-list. It was said to be off topic, concerning more patient education in general, rather than written materials. One evaluator suggested that the check-list should specify the importance of ensuring if the patient has understood the information given. This was added to the final version of the check-list. Detailed information on layout, such as margins, picture size and so on was not considered important.

The material was seen as usable for a health care worker who has basic knowledge of what written material means. The evaluators were interested in using the check-list in their own work. They were given an opportunity to receive the final version in a pdf form.

10.5 Suggestions for future research

The literature review focused on adult patients only, and any material concerning child or elderly patients were ruled out. As patients come in all ages, it would be useful to study how written patient education materials should be composed for more age-specific groups of multicultural patients.

Very few mentions on how to take into account multicultural patients' different views on gender equality and its effects on educational situations were found in the material. These subjects could be studied, especially in the light of producing target group specific written materials.

The check-list composed by the author was not tested on a large study group composed of the possible end users. Instead, it was only briefly tested on small group of potential users. Collecting feedback from a larger sample of end users would be useful in order to develop it even further and assure its usability. It should also be tested how well the guidelines work in Finland, for they were mainly drawn from studies carried out in America. For example, do the readability suggestions apply to Finnish conditions, where there are no significant problems concerning the level of reading skills amongst adult population?

Another topic of interest is how the instructions should be revised and modified if the aim was to produce written materials in an electronic form, for example as a web page.

10.6 The research as a learning process

The research process served as a chance to get familiar with systematic literature review as a study method, as well as using inductive content analysis to analyze the data. The process begun by studying these methods; the theory was combined with reading examples of the practical use of them. Bachelor's theses which use the same method were read, as well as scientific papers, so that the whole of the thesis would follow the general guidelines and commonly accepted rules of such paper.

Studying the methods formed a good base for writing the bachelor's thesis. For the novice researcher, the process offered a unique possibility to learn the basics of carrying out a research, and meanwhile produce something concrete for health care workers to use. Without the final product, the process would have been merely a theoretical introduction to the methods. However, an important aspect of a research process was not covered while composing the thesis. Testing the final product on larger study group should have been included in the process. The missing phase will be a task for the future, aiming at ensuring usability of the product, the check-list for nurses and other health care workers to use.

Some challenges were faced in the process. It seems that the term multicultural has different interpretations; in the final work, a dictionary definition was combined with what may be seen as a general definition. The thesis was mostly written in places with no access to public libraries, thus making the use of a great number of online sources unavoidable.

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APPENDICES

APPENDIX 1. Tools for good written patient education material

How do I prepare written material for my multicultural patient?

WHAT SHOULD THE MATERIAL CONTAIN?

- Information that
  - is relevant to the patient
  - is timely
  - is accurate, true and non-bias
  - explains also the possible negative outcomes of treatment or care
- Contact information for more questions
- Publishing date

HOW SHOULD THE MATERIAL LOOK LIKE?

- Clear with empty space and large font size
- Colorful with pictures relevant to the topic
- Personal and attractive

CAN MY PATIENT UNDERSTAND THE MATERIAL?

- Highlight different topics; you may use colors, bullet points or other ways to do so
- Explain terminology and avoid unnecessary medical jargon
- Ask your patient if the have understood everything; if needed, use alternative teaching methods

HOW CAN I MAKE SURE THE MATERIAL IS USEFUL TO MY PATIENT?

- Make it target group specific
  - Does this group know the terminology related to their condition?
  - How well can they read and understand the text?
  - What do they already know?
  - What should they learn more about?
- Encourage questions and independency
- Test the material with the target group before you publish it

WHAT SHOULD I REMEMBER WITH MY MULTICULTURAL PATIENT?

- Learn...
  - your target culture's habits, traditions and believes
  - their health care habits
  - the basics of their language or use the help of an interpreter
- Understand...
  - the cultural differences between your patient and you; neither one is better than the other
  - the misconceptions your patient may hold due to cultural believes
  - the willingness to adapt to your culture, or the lack of it
- Communicate...
  - using the same terminology as your patient
  - so that it enhances discussion
  - keeping in mind that pictures and words may have different meaning to you and your patient

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APPENDIX 2. Ohjeita hyvän kirjallisen potilasohjausmateriaalin tuottamiseksi monikulttuuriselle potilaalle

Miten kirjoitan hyvän kirjallisen ohjeen monikulttuuriselle potilaalleni?

MITÄ MATERIAALIN TULISI SISÄLTÄÄ?

- Tietoa, joka:
  - on tarpeellista potilaalleni
  - on ajankohtaista
  - on täsmällistä, todenmukaista ja puolueetonta
  - ottaa huomioon hoidon tai toimenpiteen mahdolliset haittavaikutukset
- Yhteystiedot lisäkysymyksiä varten
- Julkaisupäivän

MILTÄ MATERIAALIN PITÄISI NÄYTTÄÄ?

- Selkeältä
  - Älä täytä paperia liialla tekstillä
  - Käytä tarpeeksi suurta fontti-kokoa
- Asialliselta mutta houkuttelevalta
  - Käytä värejä hyväksesi
  - Aiheeseen liittyvät kuvat voivat auttaa viestin välittämisessä
- Omaperäiseltä

YMMÄRTÄÄKÖ POTILAANI MATERIAALIN SISÄLLÖN JA OHJEET?

- Korosta eri osa-alueita ja aiheita
- Selitä vaikeat sanat ja termit
- Kysy onko potilaasi ymmärtänyt kaiken; käytä tarvittaessa muita ohjausmenetelmiä

ONKO MATERIAALISTA HYÖTYÄ POTILAALLENI?

- Ota kohderyhmäsi huomioon ja suuntaa ohjeet heille
  - Tunteeko tämä potilasryhmä aiheeseen liittyvän sanaston?
  - Kuinka hyvin he osaavat lukea ja ymmärtää lukemaansa?
  - Mitä he tietävät aiheesta ja mitä heidän tulisi tietää lisää?
- Kannusta potilastasi kysymään ja olemaan itsenäinen
  - Käytä hyväksesi kysymyksiä ja auta potilasta löytämään niihin hänelle sopiva vastaus
- Testaa valmis materiaali kohderyhmälläsi ennen kuin otat sen laajempaan käyttöön

MITÄ MINUN TULEE TÄMÄN LISÄKSI MUISTAA, KUN OHJAAN MONIKULTTUURISTA POTILASTA?

- Opettele tuntemaan:
  - kohdekulttuurisi tavat, traditiot ja uskomukset
  - heidän terveydenhoitotapansa ja -tottumuksensa
  - potilaasi kielen perusteet. Voit myös käyttää tarvittaessa tulkkausapua
- Ymmärrä:
  - potilaasi tulee eri kulttuurista kuin sinä; kulttuurinne ovat ainutlaatuisia mutta yhtä hyviä
  - väärinkäsitykset joita potilaallasi voi olla hyvästä terveyden hoidosta; ne voivat liittyä hänen kulttuurinsa uskomuksiin
  - että eri potilaat suhtautuvat eri tavalla länsimaiseen terveydenhoitoon; toiset hyväksyvämmin, toiset kielteisemmin
- Kommunikoi:
  - käyttämällä samoja sanoja kuin potilaasi
  - niin, että samalla kannustat potilastasi keskustelemaan aiheesta
  - pitäen samalla mielessäsi, että sanat ja kuvat eivät ehkä merkitse potilaallesi samaa kuin sinulle

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APPENDIX 3. Reduction process of data

Original expression	Reduction	Subcategory	Main category
"...integrate the use of written educational materials and telephone counseling systematically..." (Johansson et al. 2010, 2980-2988)	**Integrating the use of different methods**	**Written by experts**	**QUALITY OF INFORMATION**
"Written educational materials can be enough if they include suitable information for patients and if they cover advice and guidance from all relevant perspectives." (Johansson et al. 2010, 2980-2988)	**Include suitable information** **Include advices** **Include guidance** **Several perspectives**	**Accurate information**	
"Written educational material, therefore, can be recommended for use with RA surgical patients, especially if they have some prior knowledge of their care-related issues." (Johansson et al. 2010, 2980-2988)	**Use written materials to Increase knowledge**	**Up-to-date information**	**Ensuring the good quality of information**
"...it is considered better to give the written educational materials to the patients with the objective of permanent and recallable information after verbal communication and education." (Secker, 1997; Hoffman et al. 2004; Scott 2004; according to Demir, et al. 2008, 259-265)	**Give written material after verbal communication** **Increasing previous knowledge**	**Brief information**	
"...used with the objective of increasing awareness and providing information, of changing behaviours and beliefs, of continuing the healthy lifestyle behaviours of the individual and providing conformance to the new health situation." (Secker 1997; Hoffmann et al. 2004; Scott 2004; according to Demir et al. 2008, 259-265)	**Increase awareness** **Provide information** **Change behaviours and beliefs** **Support healthy life style** **Provide conformance to the new situation**	**Using examples**	**Offering relevant information**
"...readable and understandable" (Singh, 2003; according to Demir et al. 2008, 259-265)	**Readable** **Understandable**	**Non-bias**	
"...should be based on scientific foundations and should be realistic and current." (Charnock et al. 1999; Rees et. Al. 2002; Gokdogan et al. 2003a, b; Griffin et al. 2003; according to Demir et al. 2008, 259-265)	**Scientific facts** **Realistic** **Current**	**General information**	
		Professional touch	
		Printing date available	
		Tested	
		Showing both negative and positive options	

"All the material was related to surgical procedures." (Demir et al. 2008, 259-265)	**Related to surgical procedures**	**Simple**	
"...there is an evaluation of whether or not the booklet is reliable." (Demir et al. 2008, 259-265)	**Reliability**	**Using visual aids**	**LAYOUT AND APPEARANCE**
"...there is an evaluation of the information quality on the subject of treatment choices" (Demir et al. 2008, 259-265)	**Quality of information** **Treatment choices**	**Practical size and format**	
"These materials can only be effective if they can be read, understood and remembered by patients." (Hoffmann et al. 2004, Mc Kenna et Scott 2007; according to Demir et al. 2008, 259-265)	**Can be read** **Can be understood** **Can be remembered**	**Large font (12-14)**	**Using relevant pictures**
"The content should be prepared in a simple, understandable form..." (Demir et al. 2008, 259-265)	**Simple content** **Understandable content**	**Using white space**	
"...make use of photographs, graphs, sketches and computer illustrations." (Demir et al. 2008, 259-265)	**Photographs** **Graphs** **Sketches** **Computer illustrations**	**Using pastel colours** **Using matte paper**	**Highlighting**
"...that a large font is used, that there is contrast between the printing and the background colours and that there are sufficient blank spaces." (Griffin et al. 2003; according to Demir et al. 2008, 259-265)	**Large font** **Contrast between text and background** **Blank spaces**	**Bulleted items**	
"...the cultural suitability was complete" (Demir et al. 2008, 259-265)	**Cultural suitability**	**Using pictures**	
"...should be prepared by health professionals according to guidebooks and by taking the target group into consideration." (Demir et al. 2008, 259-265)	**Prepared by health professionals** **According to guidebooks** **Take the target group into consideration**	**Use photographs**	**Using a personal style**
"...reading levels for all brochures were significantly lower after removal of medical terminology, but they remained above the 5th to 6th grade level recommended..." (Sand-Jecklin, 2007, 119-129)	**Remove medical terminology** **5th grade reading level**	**5th grade reading level**	
		Highlighting different topics	
		Using contrast	

"...or a combination of these." (Sand-Jecklin, 2007, 119-129)	**Combination of teaching methods**	**Highlighting important messages** **Self-care advices** **Summarizing**	**COMPREHENSION**
"...written at a level that is understandable to patients." (Sand-Jecklin, 2007, 119-129)	**Written at understandable level**		
"...content, simplicity of design, font size, use of bulleted items, appropriate use of figures and diagrams, cultural sensitivity, and ability to motivate the reader to action." (Chesson et al. 1998; Eames et al. 2003; Hoke 1999; Monsivais et al. 2003; according to Sand-Jecklin, 2007, 119-129)	**Simplicity** **Font size** **Use bulleted items** **Figures and diagrams** **Cultural sensitivity** **Motivating**		
"After removal of medical terminology from the reading selections, reading levels were significantly lower..." (Sand-Jecklin, 2007, 119-129)	**Remove medical terminology**	**Explaining**	**Keeping it simple and explaining**
"...had the best explanation of medical terms..." (Sand-Jecklin, 2007, 119-129)	**Explain medical terms**	**Avoiding medical terminology** **Explaining terminology**	
"...it is imperative for nurses and other providers to attend to the readability and comprehensibility of printed health education materials and the impact of medical terminology on readability." (Sand-Jecklin, 2007, 119-129)	**Readability** **Comprehensibility** **Impact of medical terminology**	**Paying attention to new words and terminology**	**Using alternative teaching methods**
"...presence of medical terminology can significantly impact the reading level of educational materials, a finding that supports recommendation to replace medical terms with simple explanatory words..." (Center for Health Care Strategies, 2003; according to Sand-Jecklin, 2007, 119-129)	**Replace medical terms** **Explain terminology**	**Offering examples** **Using several teaching methods**	**Making it readable and understand-able**
"...use of familiar, although complex, medical terms in a brochure targeted to a specific population may not cause difficulty with patient understanding..." (Sand-Jecklin, 2007, 119-129)	**Can use medical terms familiar to the patient** **Take the target group into account**	**Making sure the patient understands**	
"Pilot testing..." (Sand-Jecklin, 2007, 199-129)	**Pilot testing**		

"...check for patient understanding of medical terms..." (Sand-Jecklin, 2007, 199-129)	**Check the patient understands the terminology**	**Remembering the target group**	
"...information and guidelines for self-care..." (Sand-Jecklin, 2007, 199-129)	**Information** **Self-care guidelines**	**Personal style**	**USABILITY**
"...the information their patients are getting is accurate." (Adkins et Singh, 2001a, 1-8)	**Accurate information**	**Making it target group specific**	
"...readability being critical for patient education materials." (Adkins et al. 2001a, 1-8) (here readability means comprehension level)	**Readability** **Comprehension**	**Target group participation in making**	
"...publishes up-to-date, accurate, and easily understandable information..." (Adkins et al. 2001a, 1-8)	**Up-to-date** **Accurate** **Understandable**	**Understandable text**	**Motivating the patient**
"...clear, jargon-free language." (Adkins et al. 2001a, 1-8)	**Jargon-free language**	**Readable text**	
"...written by health care professionals who work closely with patients with cancer and are aware of their information needs." (Singh, 2003, 867-870)	**Written by health care professionals** **Know the target group's information needs**	**Freely available** **Interactive**	
"...reading level and readability are equally important but entirely different concepts." (Singh, 2003, 867-870)	**Easy reading level not same as easy to understand**	**Motivating**	
"...information contained in the brochures is relevant to consumers but also that the audience can read and understand it." (Singh,2003, 867-870)	**Easy to understand** **Relevant information**	**Shows contact information**	**Encouraging questions and independency**
"Patient medication information is important, especially for chronic medications that are self-administered." (Allen LaPointe et al. 2007, 98-101)	**Medication information** **Help self-care**	**Provides options**	
"For written medication information to be effective, it must [be] read and understood." (Allen LaPointe et al. 2007, 98-101)	**Patient reads the material** **Patient understands the material**	**Names the problem**	
"...of the freely available education materials..." (Adkins et al. 2001b, 279-285)	**Freely available**		

"Reading level and readability are related but inherently different concepts, with readability being critical..."(Adkins et al. 2001b, 279-285)	**Easy to read does not mean it is easy to understand**	**Using appropriate languages**	**MULTICULTU-RALISM**
"...series of pamphlets produced by the NIMH that provides a brief overview of the symptoms and treatment..." (Adkins et al. 2001b, 279-285)	**Brief overview of the topic**	**Communicating effectively**	
"...designed to provide brief, general information..." (Adkins et al. 2001b, 279-285)	**Brief information** **General information**	**Accepting differences**	
"...lowering the reading grade level of future NIMH materials would be in best interests of consumers needing information..."(Adkins et al. 2001b, 279-285)	**Low reading level**	**Being flexible**	**Learning**
"...materials were written and presented in a manner that enhanced comprehension." (Adkins et al. 2001b, 279-285)	**Enhance comprehension**	**Publishing material in several languages**	
"...increasing their audience appropriateness..." (Adkins et al. 2001b, 279-285)	**Audience appropriateness**		**Accepting**
"...the degree of the writer's consideration of the target readers' knowledge of vocabulary and subject matter, and assessed by counting the presence of new vocabulary, subject matter, and highlighting new vocabulary, definitions of new vocabulary, and synonyms..."(Adkins et al. 2001b, 279-285)	**Target group's knowledge** **Number of new vocabulary** **Define new vocabulary** **Highlight new vocabulary** **Use synonyms for new vocabulary**	**Gaining knowledge on the target culture**	**Understanding**
"...requests for additional information, clarification and better readability in the information booklets." (Moumjid et al. 2003, 128-139)	**Additional information** **Clarification** **Readability**	**Culturally suitable**	
"... 'comprehensible for as many patients as possible; this implies submitting document projects trough patients,(...) participation in the elaboration of documents.'" (Moumjid et al. 2003, 128-139)	**Comprehensive** **Suitable for many patients** **Patient participation in making the materials**	**Taking the culture into account** **Understanding the cultural differences**	

"...described the technique and side-effects of each treatment." (Moumjid et al. 2003, 128-139)	**Treatment specific information on technique and side-effects** **Describing side-effects**	**Information based on clinical guidelines**
"...presentation of treatment options." (Moumjid et al. 2003, 128-139)	**Presenting treatment options**	**Specifying terminology**
"...the use of this term did not shock the rest of the group, who felt that using another term would be hypocritical." (Moumjid et al. 2003, 128-139)	**Use correct terms**	**Less direct phrasing**
"...felt that the two other positive effects of the hormone treatment should be mentioned..." (Moumjid et al. 2003, 128-139)	**Mentioning all the possible effects** **Positivity**	**Highlight different points**
"...said that it was difficult to think ahead in such moments and that mentioning time intervals was superfluous." (Moumjid et al. 2003, 128-139)	**Information relevant at the time**	**Organize text into sections**
"...had been derived from clinical practice guidelines." (Moumjid et al. 2003, 128-139)	**Information based on clinical guidelines**	**Unwanted complications are possible, but not certain**
"Thus, the term radiation-therapist was used, specifying in parenthesis that this referred to..." (Moumjid et al. 2003, 128-139)	**Specifying terminology**	
"The group was not troubled by the personalized style of the documents..." (Moumjid et al. 2003, 128-139)	**Personalized style**	
"...suggested using less direct phrasing." (Moumjid et al. 2003, 128-139)	**Less direct phrasing**	
"...highlight the different points presented..." (Moumjid et al. 2003, 128-139)	**Highlight different points**	
"...organize the information into three main sections;..." (Moumjid et al. 2003, 128-139)	**Organize text into sections**	
"...to emphasize such complications are potential, not relevant." (Moumjid et al. 2003, 128-139)	**Unwanted complications are possible, but not certain**	

"...suggested using different fonts to discriminate between headings and subheadings." (Moumjid et al. 2003, 128-139)	**Using different fonts** **Discriminate between headings and subheadings**
"...(Trebuchet 11) was judged very readable." (Moumjid et al. 2003, 128-139)	**Font Trebuchet 11**
"Pastel colours were preferred on the ground..."(Moumjid et al. 2003, 128-139)	**Pastel colours on the ground**
"The use of smooth, pliable paper and a practical format, such as small-sized brochure,..." (Moumjid et al. 2003, 128-139)	**Smooth, pliable paper** **Practical format** **Small-sized brochure**
"...included photographs of women after mastectomy, after lumpectomy and after reconstruction." (Moumjid et al. 2003, 128-139)	**Photographs related to matter**
"...patient participation in the elaboration of information destined for them was necessary." (Moumjid et al. 2003, 128-139)	**Patient participation in designing the information**
"...advice given in the PILs was evidence based." (Lake et al. 2007, 3-8)	**Evidence based advices**
"...experts in the field of constipation, nutrition and primary care were consulted,..." (Lake et al. 2007, 3-8)	**Consulting experts**
"...were interactive and allowed patients to enter personal information and compare this to recommended guidelines." (Lake et al. 2007, 3-8)	**Interactive** **Enter personal information** **Official guidelines used**
"...were designed as A5 booklets, which contained both text and relevant images." (Lake et al. 2007, 3-8)	**A5 booklets** **Relevant images**
"Before the PILs were cognitively tested readability scores on the text were conducted using..." (Lake et al. 2007, 3-8)	**Cognitively tested** **Readability scores conducted**
"...the best understood word with this target group was 'bowel', and PILs were changed to reflect this." (Lake et al. 2007, 3-8)	**Use words the target group knows** **Know the target group**
"...further examples were therefore included..." (Lake et al. 2007, 3-8)	**Examples included**

"...presents a challenge in developing PILs which are not patronizing – yet do not assume previous knowledge." (Lake et. al, 2007, 3-8)	**Not patronizing** **Not assume previous knowledge**
"...recommended including advice on not getting anxious if a daily stool was not passed, also using particular foods they knew to be high in fiber." (Lake et al. 2007, 3-8)	**Include advices** **Include exact information**
"The PILs had to be adapted to be applicable to this range of abilities." (Lake et al. 2007, 3-8)	**Adapted to patients with different abilities**
"...resulted in a dramatic simplification..." (Lake et al. 2007, 3-8)	**Simplification**
"...bullet points(...)perceived them to contribute to the overall clear layout of the leaflets,..." (Lake et al. 2007, 3-8)	**Bullet points** **Clear layout**
"...was split into two separate leaflets." (Lake et al. 2007, 3-8)	**Separate sheets for separate information**
"...combining both of these by providing information (education), and empowering the patient..." (Lake et al. 2007, 3-8)	**Provide information** **Empower**
"...how to best provide health information to the public in a way that adults and adolescents can read, comprehend and carry out the instructions correctly." (El-Ibiary et Youmans, 2007, 58-63)	**Patients can read it** **Patients can comprehend it** **Patients can carry out the instructions**
"Materials that are developed must be easy to read, take the culture of the country into account, and be tested with various populations for comprehension and ease of use." (El-Ibiary et al. 2007, 58-63)	**Easy to read** **Take the culture into account** **Be tested** **Comprehensive**
"...also recommend that policy makers obtain from manufacturers that they provide simpler reading materials to consumers." (El-Ibiary e al. 2007, 58-63)	**Simpler reading materials**
"...package leaflet must be written in clear and understandable terms for the patient and be clearly legible in the official language." (Desplenter et al. 2009, 645-655)	**Clear and understandable term** **Use of official language**

"…U.S. Health and Human Services state that materials should be scientifically accurate; unbiased in content and tone; sufficiently specific and comprehensive; presented in an understandable and legible format that is readily comprehensible to consumers; timely and up-to-date; and useful" (Desplenter et al. 2009, 645-655)	**Scientifically accurate** **Unbiased** **Specific and comprehensive enough** **Understandable** **Timely** **Up-to-date** **Useful**	
"The pamphlet is one A4 paper printed on both sides." (Desplenter et al. 2009, 645-655)	**A4 size** **Printed on both sides**	
"…composed of several questions and provide details answers…" (Desplenter et al. 2009, 645-655)	**Questions** **Answers**	
"…written by hospital pharmacists…" (Desplenter et al. 2009, 645-655)	**Written by pharmacists**	
"Good quality written information that outlines management options could help overcome the problem." (Godolphin et al. 2001, 235-242)	**Outlines management options**	
"…it not only needs to be well presented, but also comprehensive and scientifically accurate." (Godolphin et al. 2001, 235-242)	**Well presented** **Comprehensive** **Scientifically accurate (information)**	
"…and many dietitians are also involved in their production." (Perkins, 2000, 41-49)	**Dietitians involved in making**	
"…have the name of the producer and who to contact for further information" (Perkins et 2000, 41-49)	**Name of the producer** **Contact information**	
"…show the date it was produced" (Perkins 2000, 41-49)	**Show the production date**	
"…give advice that is up to date" (Perkins 2000, 41-49)	**Information up to date**	
"…large print and clear layout…" (Perkins 2000, 41-49)	**Large print** **Clear layout**	
"The only accurate way to find if a leaflet is easy to read and understand is to pretest it with the intended group" (Perkins 2000, 41-49)	**Pretesting the leaflet**	
"…should not contain information that is misleading" (Perkins 2000, 41-49)	**No misleading information**	

"…Should summarize the key points" (Perkins 2000, 41-49)	**Summarize key points**	
"…should show that good nutrition is part of a balanced and healthy lifestyle" (Perkins 2000, 41-49)	**Advices on healthy lifestyle**	
"…should show that a healthy diet can take many forms" (Perkins 2000, 41-49)	**Healthy diet can take many forms**	
"…any explanations or additional information could be attached to the leaflet…" (Perkins 2000, 41-49)	**Attach additional information**	
"…colourful leaflets may not actually be easy to read because graphics and colours can detract from the legibility of the information." (Perkins 2000, 41-49)	**Graphics and colours may lessen the legibility of the information**	
"…'attractive, simple presentation' was more appropriate…" (Perkins 2000, 41-49)	**Simple presentation**	
"…the content of nutrition education leaflets was flexible and in line with individual department ethos." (Perkins 2000, 41-49)	**Flexible content** **In line with each department ethos**	
"…will have been evaluated by peers and piloted by patients." (Perkins 2000, 41-49)	**Evaluated by peers** **Piloted by patients**	
"…state that written documents should contain minimal use of medical jargon, have adequate white space to enhance reading, present "how to" information first, and use a font appropriate for the intended audience (i.e., at least 12-14 point font size)." (Wilson et al. 2010, 774-781)	**Minimal use of jargon** **Adequate white space** **"How to" information** **Font size 12-14**	
"…supply with written health information that is accurate, relevant, attractive, and reader appropriate." (Wilson et al. 2010, 774-781)	**Accurate information** **Relevant information** **Attractive** **Reader appropriate**	
"Healthcare providers must strive to understand the culture and diversity of patients with whom they share information and communicate with them in ways they can understand." (Hasselkus et al. 2009; according to Wilson et al. 2010, 774-781)	**Understand the culture** **Understand diversity of patients** **Communicate in an understandable way**	

"…promoting culturally competent care by acknowledging cultural beliefs and helping patients understand essential information…" (Schim et al. 2007; according to Wilson et al. 2010, 774-781)	**Culturally competent care** **Acknowledge cultural beliefs** **Help patient understand information**	
"…, pamphlets should contain the language, logic and experience of the patients." (Wilson et al. 2010, 774-781)	**The language** **The logic** **The experience of the patient**	
"…accurate, substantive information…" (Wilson et al. 2010, 774-781)	**Accurate** **Substantive information**	
"The next step was to write sentences for the pamphlets aimed at a readability level no higher than 5th-7th grade or lower…" (Wilson et al. 2010, 774-781)	**Readability level 5th-7th grade**	
"…used short sentences in conversational style and minimized medical jargon as much as possible." (Wilson et al. 2010, 774-781)	**Short sentences** **Minimized medical jargon**	
"..determine the layout and formatting by using guidelines…" (Wilson et al. 2010, 774-781)	**Use guidelines**	
"…choosing the illustrations (…) that best conveyed the message." (Wilson et al. 2010, 774-781)	**Illustrations that best convey the message**	
"Printed on 8,5"x11" white bond paper, three brochures were trifolds, and three consisted of two half-fold sheets nested together." (Wilson et al. 2010, 774-781)	**8,5" x 11" (21,6 x 29,5 cm)** **White bond paper** **Trifold** **Two half-sheets together**	
"…: less complex words, shorter sentences, appropriate writing style (e.g., conversational versus informative, active versus passive voice), illustrations to highlight the text, and attention to layout and typography." (Wilson et al. 2010, 774-781)	**Less complex words** **Appropriate writing style** **Illustrations**	

"Illustrations were hand-drawn black and white sketches depicting the intended message and various cultural groups…" (Wilson et al. 2010, 774-781)	**Black and white hand drawn sketches** **Depicting the intended message** **Depict various cultural groups**	
"…covers were produced in light shades of vibrant colors such as red, green, and purple to differentiate among topics…" (Wilson et al. 2010, 774-781)	**Light shades**	
"…were able to obtain a 3rd-6th-grade readability level,…" (Wilson et al. 2010, 774-781)	**A 3rd-6th-grade reading level**	
"Phrases in the pamphlets such as "family reunion" or "extended family" are concepts common to many diverse groups,…" (Wilson et al. 2010, 774-781)	**Words common to many diverse groups**	
"…, supplemental information such as repeated oral instructions and video or audiotapes may facilitate acquisition of knowledge…" (Ruthman et al. 2004; Thomas et al. 2000; according to Wilson et al. 2010, 774-781)	**Supplemental information** **Repeated oral instructions** **Video or audiotapes**	
"…, giving patients a choice of education materials that best suits their needs is an initial step." (Wilson et al. 2010, 774-781)	**Give patients a choice of education materials**	
"The brochures provided an overview of the cancer and related screening options and encouraged discussion with physician." (Frosch et al. 2008, 490-496)	**An overview of the topic** **Encouraged discussion with physician**	
"…was available in English and Spanish,…" (Frosch et al. 2008, 490-496)	**Available in English and Spanish**	
"…a female centered brochure created by the Heart and Stroke Foundtaion of Canada, which presented heart healthy lifestyle advice." (Grace et al. 2005, 23-27)	**Female centered** **Created by professionals** **Advice on heart healthy lifestyle**	
"Readability statistics confirmed a Flesch-Kincaid grade level <=6 for the final brochure." (Grace et al. 2005, 23-27)	**Readability level grade 6 or less**	

”CR professionals and a cardiologist reviewed the medical content to ensure accurary.” (Grace et al. 2005, 23-27)	**Reviewed by professionals**	
“…was then field-tested (…) on a convenience sample of 8 female CR patients…” (Grace et al. 2005, 23-27)	**Field tested**	
“A brief motivational interview (Rollnick et Miller, 2003) was also conducted with the administration of the brochure,…” (Grace et al. 2005, 23-27)	**A motivational interview conducted**	
“Candidates for ICD receive ICD-related patient education material when they make decisions to consent or decline a primary prevention ICD.” (Strachan et al. 2012, 495-504)	**Education materials with information on choices**	
“…many documents adhered to plain-language recommendations,…” (Strachan et al. 2012, 495-504)	**Plain language recommendations**	
“…includes information about possible problems and that would be relevant for the multicultural and debilitated population…” (Strachan et al. 2012, 495-504)	**Information about possible problems** **Information relevant for the multicultural and debilitated population**	
”The attribution of meaning to text and images is culturally constructed and can be misunderstood depending on personal and historical circumstances.” (Strachan et al. 2012, 495-504)	**Text and images can be misunderstood**	
”In most cases, these terms were followed by an explanation,…” (Strachan et al. 2012, 495-504)	**Terms followed by an explanation**	
”…incorporated typographic cues such as bullets and numbering to facilitate directing readers, and all used subheadings to help organize content.” (Strachan et al. 2012, 495-504)	**Typographic cues** **Bullets** **Numbering** **Subheadings** **Organize content**	
“…provided illustrations on the pamphlets front cover.” (Strachan et al. 2012, 495-504)	**Illustrations**	
“…used uncoated, matte paper.” (Strachan et al. 2012, 495-504)	**Matte paper**	

“…incorporated white space in their design, avoiding filling up all areas of the page with text and illustration that could tire or overwhelm the reader.” (Strachan et al. 2012, 495-504)	**White space**	
“…used visual cues such as shaded boxes and arrows…” (Strachan et al. 2012, 495-504)	**Visual cues** **Shaded boxes** **Arrows**	
“Contrast between the text, images, and paper…” (Strachan et al. 2012, 495-504)	**Contrast between text, images and paper**	
“The documents did contain material relevant to their intended audience…” (Strachan et al. 2012, 495-504)	**Material relevant to the audience**	
“The language and words used, (…) were neutral in terms…” (Strachan et al. 2012, 495-504)	**Neutral language**	
“…accompanying images in the documents that included images of people (…) were culturally diverse and age specific: older adults of various ethnic backgrounds.” (Strachan et al. 2012, 495-504)	**Images of people** **Culturally diverse** **Age specific**	
”It is therefore impertaive that information endorsed by those who offer ICDs is not confused with marketing material…” (Strachan et al. 2012, 495-504)	**Information not confused with marketing material**	
”Infomration for consent ought to be open to potions and free from hyperbole or other techniques used to lead to an affirmative response.” (Strachan et al. 2012, 495-504)	**Free from hyperbole** **Free from leading to an affirmative response**	
“…balanced with realistic information about risks and harms associated with the technology and treatment.” (Strachan et al. 2012, 495-504)	**Realistic information** **Risks and harms associated with the technology and treatment**	
”…guidelines suggest that reading level should generally not exceed grade 8, (…), this could range between grades 5 and 10.” (Strachan et al. 2012, 495-504)	**Reading level not exceed grade 8 level** **May range between 5th to 10th grade**	

"...should limit use of specialized language, avoid long sentences, incorporate an active voice, and incorporate diagrams or images along with visual and typographic cues, with an effective use of white space and contrast..." (Strachan et al. 2012, 495-504)	**Avoid specialized language** **Avoid long sentences** **Incorporate active language** **Incorporate diagrams or images** **Use visual cues** **Use typographic cues** **Use white space** **Use contrast**	
"Including images of younger ICD recipients and explaining clearly that a standard ICD will not correct symptoms or improve physical health would assist patients to interpret print education materials." (Strachan et al. 2012, 495-504)	**Include relevant images** **Explain facts clearly**	
"...should be current and reflect the most up-to-date information..." (Strachan et al. 2012, 495-504)	**Current** **Up-to-date information**	
"...created in-house by individual departments or patient education committees." (Strachan et al. 2012, 495-504)	**Created by individual departments**	
"...suggest that health care providers must specifically target smoking cessation efforts among younger healthy smokers, patients with low literacy, and ethnic minorities." (Houston et al. 2005, 1056-1061)	**Target education specially to patients with low literacy, and ethnic minorities**	
"...that these groups may be less likely to have received previous cessation advice by a health care provider and thus should be considered as at-risk groups." (Houston et al. 2005, 1056-1061)	**Less previous advices from health care providers** **At-risk group**	
"...simply providing education is not sufficient. Rather, education must be delivered in culturally and linguistically competent ways." (Gordon et al. 2010, 2701-2707)	**Providing education in a culturally and linguistically competent way**	

"...set of values, principles, behaviors, attitudes, policies and structures that enable organizations and individuals to work effectively in cross-cultural situations." (Gordon et al. 2010, 2701-2707)	**Values** **Principles** **Attitudes** **Policies** **Structures**	
"...to communicate effectively and convey information in a manner that is easily understood by diverse audiences..." (Gordon et al. 2010, 2701-2707)	**Communicate effectively** **Convey information** **Information understood by diverse audience**	
"...to provide culturally and linguistically competenet care so that racial/ethnic minority patients can better comprehend available tretament options and effectively manage their transplant if that option is pursued." (Gordon et al. 2010, 2701-2707)	**Culturally competent care** **Linguistically competent care** **Help patients better comprehend** **Treatment options** **Management options**	
"...relied upon interpreters either in person (78-82%) or by phone (76%) and half provide bilingual (51%) or bicultural staff (43-39%). (Gordon et al. 2010, 2701-2707)	**Interpreters** **In-person** **Phone** **Bilingual staff** **Bicultural staff**	
"...suggests that centers with larger Spanish-speaking patient populations are more likely to meet the needs of their Spanish-speaking patient population." (Gordon et al. 2010, 2701-2707)	**Meet the needs of the larger patient population**	
"Accordingly, alternative educational formats should be used." (Gordon et al. 2010, 2701-2707)	**Using alternative educational formats**	
"...that transplant centers with a high proportion of Hispanic or Spanish-only speaking patients increase their use of group discussions, and consider delivering discussion in Spanish." (Gordon et al. 2010, 2701-2707)	**Using group discussions** **Deliver discussion in the language of the major minority**	

"…, staff who are both bilingual and bicultural are additionally valuable for being able to communicate with patients in their native language and for being personally familiar with the cultural traditions of a specific patient population." (Gordon et al. 2010, 2701-2707)	**Bilingual and bicultural staff** **Communicate with patients' own language** **Familiar with the culture traditions**	
"More than 90% of participants indicated that the client's cognitive ability, visual ability, level of communication, primary language and perceptual ability were considered prior to delivery of information." (Gustafsson et al. 2010, 190-196)	**Considering:** **Client's cognitive ability** **Client's visual ability** **Client's level of communication** **Client's primary language** **Client's perceptual ability**	
"…that information should be conveyed verbally, with reinforcement from written and/or audiovisual materials." (Gustafsson et al. 2010, 190-196)	**Conveyed verbally** **Reinforcement from written material**	
"There should be demonstration,(…), and the client should have the opportunity to counter-demonstrate." (Gustafsson et al. 2010, 190-196)	**Demonstration** **Counter-demonstration**	
"…, such as the format and layout of written information, the complexity of language used in both written and verbal information and the depth of information covered can impact on client's understanding." (Gustafsson et al. 2010, 190-196)	**Format and layout** **Complexity of language** **Depth of information**	
"Information should be repeated at various stages in the rehabilitation journey and should be based on the client's information needs and personal situation." (Gustafsson et al. 2010, 190-196)	**Repeating information** **Based on client's information needs** **Based on client's personal situation**	
"A combination of written and verbal information with diagrams, photos…" (Gustafsson et al. 2010, 190-196)	**Combine with diagrams** **Combine with photos**	

"…aim to improve client and carer knowledge and facilitate development of effective self-management bahaviours." (Gustafsson et al. 2010, 190-196)	**Client and carer knowledge** **Develop self-management**	
"Educational level (…), hearing abilities (…), motivation (…) and learning style are all factors that may influence the layout and format of written information…" (Gustafsson et al. 2010, 190-196)	**Educational level** **Hearing abilities** **Motivation** **Learning style** **influence the layout and format**	
"We conclude that the peer-education approach was successful in assisting a new and emerging community to work effectively on…" (Drummond et al. 2011, 190-205)	**Peer-education**	
"…attitudes and knowledge deficits…"(Drummond et al. 2011, 190-205)	**Attitudes** **Knowledge deficits**	
"Resistance to change traditional values and beliefs, distrust of authorities, and barriers to open communication…" (Drummond et al. 2011, 190-205)	**Traditional values** **Beliefs** **Distrust of authorities** **Barriers to open communication**	
"Myths and misconceptions about HIV…" (Drummond et al. 2011, 190-205)	**Myths** **Misconceptions**	
"…who may not accept Western approaches to health or who may not be receptive to Western-orientated health promotion messages." (Drummond et al. 2011, 190-205)	**Do not accept Western approach to health** **Not receptive to Western-oriented health promotion**	
"Simply distributing informtaion to the community is unlikely to influence health behaviors, however, unless the information is assimilated into belief structures." (Majumdar et al. 1998; according to Drummond et al. 2011, 190-205)	**Information assimilated into belief structures**	
"…health information should be delivered by members of the target group rather than by "outsiders". " (Anonymous, 1999; according to Drummond et al. 2011, 190-205)	**Information delivered by members of the target group**	

"…to ensure that the material covered in the modules was worded and presented in a culturally sensitive manner." (Drummond et al. 2011, 190-205)	**Worded and presented in a culturally sensitive manner**	
"…that encouraged group discussion." (Drummond et al. 2011, 190-205)	**Encourage group discussion**	
"…separately for men and women to prevent gender awkwardness." (Drummond et al. 2011, 190-205)	**Separately for men and women** **Prevent gender awkwardness**	
"…as it matched the oral culture of the west African community." (Drummond et al. 2011, 190-205)	**Matched the oral culture**	
"…to ensure that the wording of questions was culturally appropriate,…" (Drummond et al. 2011, 190-205)	**Wording was culturally appropriate**	
"…the peer educators' involvement might have been perceived as permission to talk openly about issues normally considered taboo." (Drummond et al. 2011, 190-205)	**Peer educators' involvement** **Able to talk openly about taboos**	
"Self-care activities can be culturally specific" (Chou et al. 2007)	**Self-care actvities are culturally specific**	
"Patients who have particular cultural backgrounds may seek different types of self-management strategies; encounter bias and barriers in health care; have different expectations for cancer management as a result of cultural, social, and linguistic factors and established beliefs; and experience lack of knowledge or personal support." (Kagawa-Singer et al. 1997; according to Chou et al. 2007, 1162-1167)	**Different types of self-management strategies** **Bias and barriers in health care** **Different expectations** **Lack of knowledge** **Lack of personal support** **Social factors** **Linguistic factors** **Beliefs**	
"…, as well as attention to patients' cultural and ethnic backgrounds." (Chou et al. 2007, 1162-1167)	**Cultural background** **Ethnic background**	
"…, knowing self-care strategies that patients use to manage symptoms and side-effects… " (Chou et al. 2007, 1162-1167)	**Knowing patients' self-care strategies**	

"…to provide culturally repsonsive information and implement healthcare programs that assist individuals to manage active treatment for cancer." (Chou et al. 2007, 1162-1167)	**Culturally responsive information**	
"Twenty percent of participants reported using Chinese herbal medicine." (Chou et al. 2007, 1162-1167)	**Using traditional medicine**	
"…, only 8% had discussed their use of CAM with healthcare providers." (Chou et al. 2007, 1162-1167)	**Not discussed about using traditional medicine**	
"…wanting to ensure that their neighbors would not know they had cancer." (Chou et al. 2007, 1162-1167)	**Do not want the neighbors to know**	
"Effective patient-provider communication is a key process to maintain effective symptom management and self-management." (Chou et al. 2007, 1162-1167)	**Effective communication** **Maintain symptom management** **Maintain self-management**	
"…importance of nurses having a sound knowledge of cultural values, beliefs, practices and attitudes." (Holroyd, 1997; Kanitsaki, 1992; Leininger, 1996; according to Pinikahana et al. 2002, 149-154)	**Knowledge of cultural values;** **Beliefs;** **Practices;** **Attitudes**	
"…culture care preservation and maintenance; culture care accommodation or negotiation and; culture care restructuring and repatterning." (Leininger 1996; according to Pinikahana et al. 2002, 149-154)	**Preservation and maintenance** **Accommodation** **Negotiation** **Restructuring and repattering**	
"Culturally competent care in its broadest sense is knowing, explaining, interpreting and predicting nursing care within the context of the patient's cultural beliefs and practices." (Doswell et al. 1998; according to Pinikahana et al. 2002, 149-154)	**Knowing** **Explaining** **Interpreting** **Predicting nursing care**	
"…with respect to differences and similarities in their cultural values, beliefs and lifeways…" (Leininger, 1997; according to Pinikahana et al. 2002, 149-154)	**Respect to differences** **Respect to similarities**	

"..., nurses should have the knowledge and skills to understand cultural diversity in Australian society." (Pinikahana et al. 2002, 149-154)	**Knowledge** **Skills** **Understand cultural diversity**	
"The nature of health condition, diagnosis and treatment pattern vary between cultures." (Pinikahana et al. 2002, 149-154)	**Variations between cultures**	
"Clearly, the cultural values and perceptions of NESB clients need to be emphasized in nursing or therapeutic encounters." (Pinikahana et al. 2002, 149-154)	**Emphasizing cultural values;** **Cultural perceptions**	
"A partnership between NESB clients and health care providers is vital in any effort to develop more flexible care package." (Pinikahana et al. 2002, 149-154)	**Partnership between clients and health care providers** **Flexible care**	