REVIEWS

Counseling chronically ill adults in the healthcare setting: An integrative literature review

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Abstract

Background: Chronic diseases among the adult population have increased rapidly worldwide. Chronically ill adults use health services more frequently; they are hospitalized more often and for a longer time than the average. Although counseling is an essential part of the care of chronically ill adults, there is no clear conception of counseling elements in healthcare settings. The aim of this integrative review is to describe the key elements of counseling of adults with chronic diseases.

Methods: This integrative literature review describes elements of the counseling of chronically ill adults. The study was conducted by means of a systematic search of CINAHL (1981 to April 2010), Medline (1973 to March 2010) and Medic (1978 to April 2010) databases. Three reviewers selected the studies and two reviewers independently assessed the quality of studies. 31 studies were included in the data extraction and narrative synthesis.

Results: The review identifies the following typical elements in the counseling of adults with chronic disease: the counseling needs of chronically ill adults; the implementation of counseling; and the impact of counseling. The counseling needs of chronically ill adults included 1) gaining an understanding of the disease and treatment in relation to everyday life, 2) handling of emotions, 3) social support. The implementation of counseling concerned 1) need-based and goal-oriented counseling, 2) the content of counseling, 3) the nature of interaction and atmosphere of counseling, 4) counseling time, 5) counseling methods and materials, and 6) challenges of implementation. The impact of counseling included increased 1) compliance with medication, 2) ability to cope with feelings, 3) understanding of the disease, and 4) quality of life.

Conclusions: This study found that effective counseling should be based on the individual needs of chronically ill adults and it should include more knowledge about social services and provide support in handling emotions. The study also revealed it is important to plan counseling and to set goals in conjunction with chronically ill adults. The results of this review are useful for the development of counseling of chronically ill adults in a variety of healthcare settings.

Key words

Chronic disease, Chronic illness, Counseling, Education, Literature review

1 Introduction

The presence of chronic diseases among the adult population has increased worldwide. In 2005, 35 million people died of a chronic disease, half of whom were under the age of 70 [1, 2]. Chronic diseases, such as heart disease, cancer, respiratory disease and diabetes, are the leading cause of disability and death worldwide [2]. In Europe, chronic diseases are predicted to increase over the next 10 years, due, in particular, to increased obesity in both men and women [3, 4]. Because chronic diseases generally exhibit slow progression [2, 5], chronically ill adults use the healthcare system more frequently than those without chronic diseases [6, 7]. The rate of hospital admissions, as well as the length of hospital stay, is higher than usual among the chronically ill [8, 9]. In healthcare settings, counseling forms an essential part of their care.

There is no commonly accepted definition of counseling in a nursing context [10-13]. The term counseling is used alongside terms such as patient education, information, advice, teaching, or guidance. The use of such multiple terms complicates the definition of counseling. Effective counseling may be understood to consist of several different elements, such as client-centricity, active and goal-oriented interaction, adequate resources, sufficiency and positive impact [11, 14].

Several earlier studies have shown that counseling based on individual needs gives patients a sense of participation in their own treatment, strengthening the positive results of care [15, 17]. In counseling, the patient should be seen as an active interacting partner whose views and perceptions are sought by the staff and treated with respect [11, 17, 18]. The confidential atmosphere provides an opportunity to discuss with the patient their feelings and attitudes towards the disease [19, 20]. Within this co-operation, the communication skills of staff, and their attitude and sensitivity in identifying the patients' needs are key elements [21, 22]. The provider of health treatment promotes an atmosphere of trust through empathy and kindness towards patients [20]. The participation of family members in counseling should also be encouraged [11, 19].

According to Kääriäinen [11], counseling is an individual process with a goal-oriented approach, which should be implemented with adequate resources and carried out interactively. However, earlier studies have shown that staff members do not always have enough time to counsel patients [17, 23]. Individuals' level of knowledge about their disease varies, and they may have different expectations about the content of the counseling [20, 24, 25]. In addition, there is currently a lack of planning in patient counseling, which does not always take account of individual needs [12, 14, 26, 27]. Although individual counseling is known to have positive effects on self-management and compliance [17, 28-30], positive outcomes are not inevitable. A main component of a chronically ill person's ability to cope relies on sufficient knowledge about their disease. Therefore, the type and style of counseling that chronically ill patients and their family members receive from staff are important [10, 31, 32].

Several differences exist between countries in the organization of counseling of chronically ill adults. In Finland, nurses counsel patients with different chronic diseases in the same outpatient clinic, particularly in primary care. Many studies have reported on the counseling of patients with specific chronic diseases, such as rheumatoid arthritis, diabetes, or heart failure [33, 34-36]. However, a search of the literature evaluating counseling in the area of physical healthcare yielded no published systematic reviews directly aimed at the general counseling of adults with chronic disease. In view of the growing number of adults with chronic diseases and the lack of resources in healthcare, the current integrative review is crucial in order to synthesize the results of previous studies and chart the need for future studies. The results may also be used for instrument development and to create a new evidence-based counseling model for the care of chronically ill adults. The aim of this integrative literature review is thus to describe the key elements of counseling of adults with chronic diseases.

2 Methods

2.1 Searching

The literature search was performed systematically using three nursing databases CINAHL (1981 to April 2010), Medline (1973 to March 2010), and the Finnish Database of Medicine and Health Sciences, Medic (1978 to April 2010). These databases were chosen as they were most likely to contain data pertaining to the nursing of chronically ill adults in healthcare settings. The following keywords were used: “patient”, or “adults”, “advice”, “counseling”, “education”, “teaching”, “informing” or “guidance”; and “chronic disease”, “chronically ill”, “long-term disease” or “long-lasting illness”; “potila*” or “asiak*” “ohjau*”, “neuvo*”, “opetu*”, “inform*” or “opast*”, “potilasohjau*” or “potilasope*”. The search strategy and choice of terms were made in consultation with a librarian.

2.2 Selection

The inclusion and exclusion criteria are described in Table 1. Studies were subjected to a three-phase selection process, and all studies were judged against the inclusion criteria and review question [37, 38]. Each phase of the selection process was performed by two reviewers. In the first phase, a computerized search produced a total of 4321 studies. Secondly, studies were selected by title according to the study question (n=1237). In the third phase, the abstract was checked against the criteria (n=617). Finally, the full texts of the studies identified from the databases and the Finnish University Library (n=212) were reviewed. Between stages, reviewers discussed any disagreements and rated each study as relevant or not relevant according to the criteria. A detailed chart of the studies selected for inclusion or rejection was kept, which also recorded reasons for rejection. Following the three stages, 43 studies were found to meet the inclusion criteria. The selection process is described in Figure 1.

Table 1. Inclusion and exclusion criteria

Inclusion criteria

- Empirical studies, peer-reviewed
- Somatically, Chronically ill adult or family members (over 18 years) or the staff working with chronically ill adult
- Focused chronically ill/family member or staff counseling
- Available electronic or manual form in the University library or Google Scholar
- Papers published English, Swedish or Finnish
- Original papers, no time limit

Exclusion criteria

- Not mentioned name of chronic disease
- Concerning general pain management, kidney disease, cancer or mental disease
- Experts’ opinions or anonymous papers, leaflets
- Studies if they were University or Polytechnic theses.

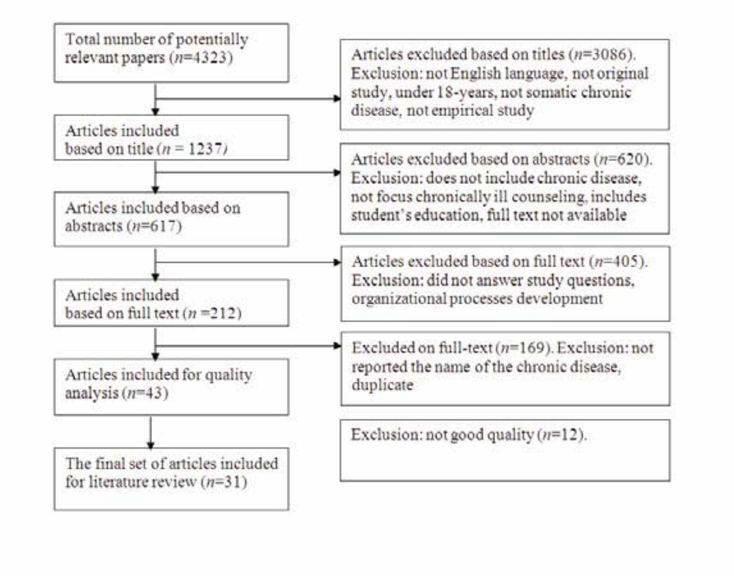

Figure 1. Database search process ‘in the figure is missing arrow

2.3 Validity assessment

The Joanna Briggs Institute's critical appraisal instrument was used to assess the methodological quality of the 43 studies [39]. All studies were assessed by two reviewers independently, using a 10-criteria checklist for qualitative studies, a 9-criteria checklist for descriptive surveys and cohort studies. Each criterion fulfilled was allocated one point, giving a maximum of 10 points for qualitative studies and 9 points for descriptive surveys and cohort studies. The minimum was 0 points. The cut-off for selection was set at 50% of the available points to ensure the included studies were of sufficient quality, so qualitative studies, descriptive surveys and cohort studies cut-off selection score was five points. Reviewers scored the studies independently and compared their results. After quality assessment, 31 studies were included in the review.

2.4 Data extraction and narrative synthesis

The following data were extracted from the studies: the author, country in which the research was conducted, publication year, sample and context, aim, design/method (see Table 1), with the aim of reviewing descriptions of the counseling of chronically ill adults in healthcare. Because the design, samples and settings of the primary studies differed, it was not appropriate to combine the studies statistically. Hence, the data synthesis is presented in a narrative form.

3 Results

3.1 General description of studies

A variety of methods were used within the 31 empirical research studies. Most of the studies were descriptive using interviews, observation and other qualitative methods (n=25). One descriptive survey employed a questionnaire [40] and one descriptive survey involved interviews [41]. A follow-up study [42] and three other studies used mixed methods, such as interviews and questionnaires or observation [43-45].

Sample size in the studies ranged from one to 556. The chronic diseases researched included Chronic pulmonary disease (COPD) [46, 47], asthma [48, 49], hypertension [50, 51], rheumatoid arthritis [42, 43, 52, 53], diabetes [40, 54, 55-58], heart failure [59-61] and chronic back pain [44, 62]. One study encompassed several chronic diseases: diabetes, congestive heart failure and hypertension [41]. Participants included both chronically ill adults and their family members [53, 63]. In two of the studies, the participants comprised both chronically ill adults and nursing staff [64, 65], whereas in other studies, the nursing staff were the sole participants [66-69]. One study involved adults with chronic illness, their family members and nursing staff [70]. Studies included in the review were conducted in eight countries: USA, Sweden, United Kingdom, Finland, Canada, Norway, Belgium and France. Table 2 provides a general description of the selected studies.

Table 2. Overview of selected papers (n=31)

Authors	Year/ Country	Sample and context	Aim	Design/Methods
Ågard et al.(59)	2004, Sweden	Chronic heart failure patient (*n*=40), in university hospital	To explore patients' knowledge of heart failure and their attitudes toward medical information and assess different patient-related factors that might hamper the improvement of patients' knowledge.	A qualitative study Semi-structured interviews Grounded-theory
Anderson-Loftin and Moneyham (58)	2000, USA	Type 2 diabetes of Southern African Americans (*n*=22), in community health clinic.	To explore the long-term disease management needs of individuals in a community health clinic.	A qualitative study Focus group interviews Content analysis

(Table 2 continued on page 189)

Table 2. (continued)

Authors	Year/ Country	Sample and context	Aim	Design/Methods
Ashe et al.(52)	2005, Canada	Rheumatoid or inflammatory arthritis patient (*n*=10), in community health care.	To explore the long-term disease management needs of individuals in a community health clinic.	A qualitative study Individual and focus group interviews Inductive descriptive analysis
Brown et al. (51)	2007, USA	Older men with hypertension (*n*=30), in medical center.	To elucidate older patients' goal regarding hypertension control and how goals relate to patients' self-management and self-care activities.	A qualitative study Semi-structured interviews Constant comparative method
Bull and Jervis (63)	1997, USA	Chronically ill older women and their daughters (*n*=33) (congestive heart failure, COPD, diabetes), after hospital discharge.	To learn how older women and their caregiving daughters managed care following the mother's hospitalization because of a chronic illness.	A qualitative study Semi-structured interviews Content analysis
Cooper et al.(62)	2009, United Kingdom	Patient with chronic low back pain (*n*=25), in primary care.	To explore chronic low back pain patients' perceptions of various aspects of physiotherapy management of chronic low back pain.	A qualitative study Semi-structured interviews Content analysis
Eld et al. (65)	2006, Sweden	Chronic heart failure patient (*n*=3) and two nurses.	To explore the phenomena of patient participation and non-participation as shown in patient visits to a nurse-led clinic.	Triangulation Observation and interviews Naive reading technique and structural analysis
Osterlund Efraimsson et al. (47)	2009, Sweden	COPD- patient (*n*=30), in primary health care.	To explore the structure, content in communication and self-management education in patient's first consultation at nurse-led clinics in primary health care	An observational study Videotaped consultations The Consultation Map
Gardiner et al. (46)	2009, United Kingdom	COPD-patient (*n*=21), in primary care.	To determine prospectively the needs of patients in the advanced stages of COPD.	A qualitative study Semi-structured interviews Content analysis
Gazmararian et al.(41)	2003, USA	Patient with asthma (*n*=115), diabetes (n=266), congestive heart failure (*n*=166) and/or hypertension (*n*=214). N= 653, in primary care.	To explore the relationship between health literacy and knowledge of chronic disease among Medicare managed care patients.	A quantitative study Interviews by face-to-face and phone. Statistical analysis
Granger et al.(64)	2009, USA	Chronic heart failure patient (*n*=6) and their physicians (*n*=6), inpatient setting.	To explore patient and physician perspectives about adherence and how the exchange of information.	A qualitative study. Semi-structured interviews Content analysis
Harding et al. (70)	2008, United Kingdom	Chronic heart failure patients (*n*=20) and their close people (*n*=11). Palliative care staff (*n*=6) and cardiology staff (*n*=6), in hospital.	To generate recommendations for the appropriate provision of feasible and accepted information for patients and their family careers.	A qualitative study Semi-structured interview Content analysis

(Table 2 continued on page 190)

Table 2. (continued)

Authors	Year/ Country	Sample and context	Aim	Design/Methods
Hagberth et al. (60)	2008, Sweden	Patient with cardiac event (*n*=13).	To examine how the Norwegian Vifladt & Hopen inspired model of a patient group education programme was experienced by older women.	A qualitative study Focus group interviews Content analysis.
Holmström and Rosenqvist (56)	2004, Sweden	Type 2 diabetes (*n*= 18)	To explore the role of a professional development supervisor in helping health professionals to reflect on their role in patient consultations.	A qualitative study Videotape observation Inductive content analysis
Iversen and Hanestad (40)	2005, Norway	Type 2 diabetes (*n*=101), in primary health care.	To investigate what education and counseling patient had received in primary health care.	A quantitative study Questionnaire Statistical analysis
Kettunen et al.(57)	2004, Finland	Type 2 diabetes (*n*=1), in primary care.	To investigate the nurses' communication activity that produced change talk	Case study Discourse analysis
Kyngäs et al.(43)	2004, Finland	Patient with arthritis (*n*=30), in ward (*n*=3) and outpatient clinic (*n*=1)	To describe patients education from the perspective of patients with arthritis.	A qualitative study Interviews and questionnaires Content analysis Statistical analysis
Kyngäs et al. (66)	2005, Finland	Nursing staff (*n*=12)	To describe patients education from the perspective of health care providers.	A qualitative study Inductive content analysis
Laerum et al. (44)	2006, Norway	Patient with chronic low back pain (*n*=35), in outpatient clinics.	To identify core elements of what patients with chronic low back pain perceive as good clinical communication and interaction with a specialist ("The Good Back-consultation")	Qualitative and quantitative methods. Observations and semi-structured interviews Template analysis
Lundh et al.(67)	2006, Sweden	Nurses providing care for COPD patient in primary health care (*n*=20).	To describe and analyze the way a group of nurses perceived the care of patient	A qualitative study. Interviews Phenomenograhic analysis.
Macdonald et al.(69)	2008, United Kingdom	Nurses in primary care (*n*=25).	To explore practice nurse involvement in facilitation of self-management for long-term conditions.	A qualitative study Semi-structured interviews Grounded-theory
Nagelkerk et al.(55)	2006, USA	Type 2 diabetes (*n*=24), in primary care.	To describe the perceived barriers to self-management of adults with type 2 diabetes in rural setting.	An exploratory descriptive study Focus group interviews Content analysis
Ogedegbe et al.(50)	2004, USA	Hypertension patient (*n*=93), in primary care practice.	To elicit and characterize the expectations of treatment in a group of hypertensive African-American patients followed in a primary care practice.	A qualitative study In-dept open-ended interviews Content analysis

(Table 2 continued on page 191)

Table 2. (continued)

Authors	Year/ Country	Sample and context	Aim	Design/Methods
Raynor et al.(48)	2004, United Kingdom	Patient with asthma (*n*= 23), not mentioned context.	To provide an understanding of the experiences of people with a chronic illness of medicines information.	A qualitative study Focus group interviews Content analysis
Richardson (49)	1991, Canada	Patient with asthma (*n*=40), in out-patient clinic.	To examine the perceived learning needs to manage the associated health problems of young adults.	A qualitative study Semi-structured interviews Content analysis.
Rogers et al.(61)	2000, United Kingdom	Chronic heart failure patient (*n*= 27), in hospital ward and outpatient clinics	To explore patients' understanding of chronic heart failure, to investigate their need for information and issues concerning communication.	A qualitative study In-depth interviews Content analysis
Vermeire et al. (54)	2003, Belgium	Type 2 diabetes patients (*n*=46)	To examine the health beliefs of people living with type 2 diabetes, the way they communicate about it and problems they encounter in adhering to therapeutic regimens.	A qualitative study Focus group interviews Content analysis.
Vihijärvi (53)	2008, Finland	Rheumatoid arthritis patient (n=10) and family members (n=10).	To describe how the rheumatoid arthritis patients and their family perceive the education given by the nurse.	A qualitative study Interviews Inductive content analysis
Viller et al.(42)	1999, France	Rheumatoid Arthritis patient (*n*= 556) for four counties, in hospital settings.	To investigate compliance with drug treatment and the factors affecting it and assess the relationships between compliance and patients' beliefs about disease, satisfaction with health care professional and information.	A prospective cohort study Interviews, questionnaires Statistical analysis
Williams et al. (45)	1998, USA	Patient with hypertension (*n*= 402) and diabetes (*n*=114).	To examine the relationship between literacy and knowledge of chronic disease.	A cross-sectional study Interviews and measurement by TOFHLA Statistical analysis
Zakrisson and Hägglund (68)	2010, Sweden	Asthma / COPD nurses (*n*= 12), in primary care	To deprive the experiences of asthma/COPD nurses' in primary health care of educating patient.	A descriptive qualitative study Semi-structured interviews Content analysis

3.2 Key elements of counseling adults with chronic illness

The counseling needs of chronically ill adults, the implementation of counseling and the impact of counseling are key elements of counseling adults with chronic diseases.

3.3 The counseling needs of adults with chronic illness

The counseling needs of adults with chronic illness consisted of an understanding of the disease and its treatment in relation to everyday life, handling emotions and social support (see Table 3).

Table 3. Narrative synthesis of counseling needs with chronic illness

Disease	**Knowledge of disease and treatment in relation to everyday life**
Heart disease: Bull & Jevis 1997, Williams 1998, Rogers 2000, Gazmararian 2003, Ågård 2004, Ogedegbe 2004, Eldh 2006, Brown 2007, Hagberth 2008, Harding 2008, Granger 2009	Knowledge of disease and symptoms; medication; side-effect; nutrition social services, lifestyle; knowledge of future; knowledge comprehensible; daily living
Asthma disease: Richardson 1991, Raynor 2004	Knowledge of disease and symptoms; medication; side-effect; physical activity
Diabetes disease: Bull & Jevis 1997, Williams 1998, Anderson-Loftin & Moneyham 2000, Gazmararian 2003, Vermeire 2003, Iversen & Hanestad 2005, Nagelkerk 2006, Vermeire 2003	Knowledge of disease and symptoms; medication, nutrition, physical activity social services, lifestyle; knowledge of complication; knowledge comprehensible; daily living
Rheumatoid arthritis / arthritis: Kyngäs 2004, Ashe 2005	Knowledge of disease and symptoms; medication, side-effect; nutrition social services; daily living
COPD disease: Bull & Jevis 1997, Osterlund Efraimsson 2009, Gardiner 2009	Knowledge of disease and symptoms; medication social services; lifestyle; knowledge of future; knowledge comprehensible; daily living
Chronic back pain: Laerum 2006, Cooper 2009	Knowledge of physical activity; knowledge of future; knowledge comprehensible; daily living
Disease	**Handling emotions**
Heart disease: Ågård 2004, Raynor 2004, Hagberth 2008, Harding 2008	Anxiety, loneliness and insecurity, depression, hope, distrust
Diabetes disease: Anderson-Loftin & Moneyham 2000, Vermeire 2003	Anxiety, depression
Rheumatoid arthritis / arthritis: Ashe 2005, Vihijärvi 2008	Loneliness and insecurity, depression, hope
Asthma disease: Richardson 1991, Zakrisson & Hagglund 2009	Anxiety, depression
COPD disease: Gardiner 2009, Zakrisson & Hagglund 2009	Anxiety, loneliness and insecurity, depression, distrust
Chronic low back pain: Laerum 2006	Depression, distrust
Disease	**Social support**
Heart disease: Brown 2007, Hagberth 2008	Support for the family member, emotional support for the peers, knowledge of disease from peers
Diabetes disease: Anderson-Loftin & Moneyham 2000, Vermeire 2003, Kettunen 2004, Nagelkerk 2006	Mental support for the staff, support for the family member, knowledge of disease from peers
Rheumatoid arthritis / arthritis: Kyngäs 2004, Ashe 2005, Vihijärvi 2008	Mental support for the staff, support for the family member, emotional support for the peers, knowledge of disease from peers.

Chronically ill adults need an understanding of the disease and its treatment in relation to everyday life, including information about the disease and its symptoms, medication, side-effects and complications, nutrition, physical activity, lifestyle, daily living, the progression of the disease, and health and social services. Knowledge about the disease, such as its name and associated symptoms, the relief of symptoms and guidelines for treating the disease, was important for adults with chronic illness [41, 43, 45, 46, 49, 51, 54, 58, 59, 61, 63, 64]. Despite having counseling, many adults with chronic illness had difficulty in understanding the information and advice they received [44-46, 55, 59, 60, 61, 70].

Information about medication was a core element in counseling [40, 48-50, 60, 63], but many adults with chronic illness needed more specific knowledge, such as how to use medicine, how the medicine works, and the name of the medicine [48-50, 60, 63]. In addition, they were largely unaware of side-effects [43, 48-50, 61]. They also needed to understand more about the complications of their disease [40, 54].

Furthermore, adults with chronic illness did not receive sufficient information about nutrition [40, 43, 45, 55, 63]. Although advice about physical activity was an essential part of counseling, the information received was insufficient [40, 41, 44, 49, 62]. Adults with chronic illness had limited knowledge of the lifestyle changes which their disease required, including changes in smoking, diet [40, 45, 47] and alcohol use, the need for foot care and travel considerations [40]. They also needed counseling that fitted in with their daily lives [52, 55, 58, 62-64]. Although knowledge about the progression of the disease was important to adults with chronic illness [44, 59, 61], they rarely discussed the future and the end of life with staff [46, 61, 65, 70].

Finally, effective disease management was hindered by a lack of knowledge about health and social services. Chronically ill adults did not know about the health services which were available [43, 63], nor how to obtain insurance cover [55, 58]. The high cost of drugs was an obstacle for some to buying the medicine they required [55].

Chronically ill adults needed counseling in handling their emotions, such as anxiety [46, 49, 54, 58, 60, 68], distrust [44, 46, 48, 61], loneliness [46, 52, 53, 60], insecurity [52, 60, 70] and depression [44, 46, 49, 52, 58, 59, 68]. Anxieties for those with diabetes included the fear of hypoglycemia [54], while those with chronic obstructive pulmonary disease were plagued by the fear that they would die of breathlessness or suffocation [46]. Other chronically ill adults feared death [46, 60]. Feelings of distrust related to the fact that some adults with chronic illness felt they were not told everything about their disease by the nursing staff [44, 46, 48, 61]. For chronically ill adults, hope was powerful and they did not want to lose it [52, 59].

Social support provided by staff, family members and peers was also meaningful for chronically ill adults. The emotional support of the nursing staff is important [43, 54, 55, 57, 66], as is the support of family members to encourage chronically ill adults' self-care [51, 55]. The opportunity to take family members to counseling was valued [53, 60]. Chronically ill adults' peers could also help them to talk about their emotions [52, 60] and offer advice about the best practice in treating their disease [43, 52, 58, 60].

3.4 The implementation of counseling

Elements of the implementation of counseling included: need-based and goal-oriented counseling, the content of counseling, interaction and the atmosphere of counseling, counseling time, counseling methods and materials and the challenges of implementing counseling (see Table 4).

Table 4. Narrative synthesis of implementation counseling

Disease	**Needs based and goal-oriented counseling**
Heart disease:	
Eldh 2006, Brown 2007	Individual needs of disease, goal of self-care
Diabetes disease:	
Holmström 2004, Iversen 2005, Macdonald 2008	Individual needs of disease, support the goal, goal of self-care
Rheumatoid arthritis / arthritis:	
Kyngäs 2004	Individual needs of disease, support the goal
COPD disease:	
Lundh 2006, Zakrisson & Hagglund 2009	Individual needs of disease, support the goal
Chronic low back pain:	
Cooper 2009	Support the goal , goal of self-care

(Table 4 continued on page 194)

Table 4. (continued)

Disease	**Content of the counseling**
Heart disease:	
Bull & Jevis 1997, Hagberth 2008, Granger 2009	Counseling for disease, counseling for physical activity and nutrition, develop content of counseling
Diabetes disease:	
Bull & Jevis 1997, Anderson-Loftin & Moneyham 2000, Vermeire 2003, Kettunen 2004, Macdonald 2008	Counseling for family role, counseling for physical activity and nutrition, develop content of counseling,
COPD disease:	
Bull & Jevis 1997, Osterlund Efraimsson 2009, Zakrisson & Hagglund 2009	Counseling for disease, counseling for physical activity and nutrition, counseling for medication, develop content of counseling
Asthma disease:	
Raynor 2004, Zakrisson & Hagglund 2009,	Counseling for disease, counseling for medication, develop content of counseling
Rheumatoid arthritis / arthritis:	
Kyngäs 2004	Develop content of counselling
Disease	**Interaction and atmosphere of counseling**
Heart disease:	
Bull & Jevis 1997, Eldh 2006, Harding 2008	Autoritary counseling, dialog in counseling, conversation and to be heart in counseling, individuality of counseling, supportive interaction, unpleasant atmosphere
Rheumatoid arthritis / arthritis:	
Kyngäs 2004, Ashe 2005	Autoritary counseling, dialog in counseling, conversation and to be heart in counseling, individuality of counseling
Diabetes disease:	
Bull & Jevis 1997, Anderson-Loftin & Moneyham 2000,Vermeire 2003, Holmström & Rosenqvist 2004, Kettunen 2004, Nagelkerk 2006, Macdonald 2008	Autoritary counseling, dialog in counseling, conversation and to be heart in counseling, individuality of counseling, counseling language, presence of staff, supportive interaction, unpleasant atmosphere
Asthma disease:	
Raynor 2004, Zakrisson & Hagglund 2009	Individuality of counseling, presence of staff, unpleasant atmosphere
COPD disease:	
Bull & Jevis 1997, Lundh 2006, Zakrisson & Hagglund 2009	Autoritary counseling, dialog in counseling, individuality of counseling, counseling language, presence of staff, unpleasant atmosphere
Chronic low back pain:	
Laerum 2006	Counseling language, conversation and to be heart in counseling, presence of staff , supportive interaction.
Disease	**Counseling time**
Heart disease:	
Eldh 2006, Harding 2008	Insufficient counseling time, timing of counseling
COPD disease:	
Osterlund Efraimsson 2009, Zakrisson & Hagglund 2009	Insufficient counseling time, timing of counseling
Asthma disease:	
Raynor 2004, Zakrisson & Hagglund 2009	Insufficient counseling time, timing of counseling
Rheumatoid arthritis / arthritis:	
Vihijärvi 2008	Timing of counseling
Disease	**Counseling methods and materials**
Heart disease:	
Bull & Jevis 1997, Brown 2007, Hagberth 2008, Harding 2008	Group counseling, written counseling material, demonstration, new contact methods
Rheumatoid arthritis / arthritis:	
Kyngäs 2004, Vihijärvi 2008	Group counseling , written counseling material, oral counseling, individual counseling, new contact methods

(Table 4 continued on page 195)

Table 4. (continued)

Diabetes disease;	
Bull & Jevis 1997, Holmström and Rosenqvist 2004, Nagelkerk 2006, Macdonald 2008	Group counseling , written counseling material, demonstration, individual counseling,
COPD disease:	
Bull & Jevis 1997, Lundh 2006	Written counseling material, demonstration
Asthma disease:	
Raynor 2004	Written counseling material
Chronic low back pain:	
Cooper 2009	New contact methods
Disease	**Challenges in implementation of counseling**
Heart disease:	
Ågård 2004, Eldh 2006, Harding 2008, Granger 2009	Obstacles from staff perspective, Obstacles from patient perspective, Obstacles of documentation
Diabetes disease:	
Nagelkerk 2006	Obstacles from patient perspective
COPD disease:	
Zakrisson& Hagglund 2009	Obstacles from patient perspective
Asthma disease:	
Zakrisson & Hagglund 2009	Obstacles from patient perspective
Chronic back pain:	
Laerum 2006	Obstacles of documentation

Counseling was based on chronically ill adults' individual needs [40, 43, 56, 65-67] and goals [43, 68, 69]. However, there were also examples of counseling in which the needs of chronically ill adults were not taken into account [66], or in which the nursing staff identified needs but did not discuss them with the chronically ill adults [56]. In goal-oriented counseling goals were discussed with chronically ill adults [43], who then implemented them in their daily disease treatment [51, 62]. Such counseling attempted to set realistic goals to support chronically ill adults to treat themselves [68, 69]. Although feedback was viewed as an essential part of goal-oriented counseling, chronically ill adults rarely received feedback from the nursing staff about their efforts to manage their disease [43, 51]. One barrier to receiving feedback was disagreement between chronically ill adults and staff about treatment goals [51].

The content of the counseling was based on the needs of chronically ill adults, such as their family role, the disease, physical activity, nutrition and medication. Those who received an overview of information about their disease as part of counseling [68] were able to describe the symptoms of their disease in detail [64, 68]. Counseling about the disease also included the links between smoking and the pathophysiology of the disease [47]. Information about medication was an integral part of counseling; for example, nursing staff advised chronically ill adults on aspects relating to the use of their medication, such as inhalation [47, 48] and controlled inhalation techniques [47]. As nutrition and physical activity can have an impact on disease treatment, advice on nutrition [58, 60, 64] and physical activity [47, 58, 60] formed an essential part of counseling. Counseling also concerned the role of family; some chronically ill patients discussed the role of family members in caring for themselves [57, 69]. Feedback from chronically ill adults on the content of counseling was not uniform as the content of counseling varied between counselors [43, 48, 54, 58, 63, 66].

Interaction and the atmosphere of counseling included authoritarian counseling, the language of counseling, dialog in counseling, the presence of nursing staff and counseling in a negative atmosphere. Authoritarian counseling was implemented based on the needs and activity of nursing staff [43, 57, 65-67, 69]. However, staff often paid attention to the language and style of counseling [44, 67, 69]. Interaction in counseling rarely involved a two-way discussion with the chronically ill adult [43, 57, 65, 67], even when staff were interested in the chronically ill adults' accounts of their experience [44, 52, 56, 70] or staff believed that direct discussion of positive and negative aspects of their care would be beneficial for chronically ill adults [70]. However, sometimes the staff used two-way methods such as hypothetical questions and peer talk [70]. Supportive interaction was demonstrated when chronically ill adults felt that they were in tune with staff [65] and when staff provided counseling which responded to their questions [44, 58]. Individual counseling led to people feeling that they were treated as an individual [43, 54, 55, 65, 66, 68]. However, sometimes the staff used hypothetical questions and peer talk [57]. Staff played an important role in counseling by being attentive and available [44, 68, 69].The attentive staff and being available means presence of staff in implementation of counseling [44, 68, 69].

Counseling was not always carried out in a pleasant atmosphere. Some chronically ill adults felt that counseling was not voluntary [48] and that the staff were angry with them during the follow-up [54]. They wanted to be treated as adults [54] and to receive answers to their own or their family members' questions [63]. Nursing staff need good communication skills and an empathetic, nonjudgmental attitude to create a supportive atmosphere for chronically ill adults [44, 58, 60]. Nursing staff need emphatic, good interaction skill and nonjudgmental attitude to create a supportive atmosphere for chronically ill adults [44, 58, 60].

Chronically ill adults expected counseling to be allocated an appropriate amount of time, which should fit in with their own timetable [53, 66, 70]. However, it was clear that lack of time was a problem [47, 66, 68, 70], resulting in a limited amount of counseling being made available [49] and short counseling sessions [48]. In some cases, counseling was carried out in the waiting room before and after medical investigations [47].

Counseling was implemented using different counseling methods and materials such as group or individual sessions [43, 53, 55, 56, 60, 66]. Counseling was typically conducted orally, although written material was usually provided as part of the counseling session [43, 55, 66] as an aid for patients' memories [43, 48, 63]. In group counseling, chronically ill adults had an opportunity to discuss their disease [43, 58] and relate their own experience of the disease and treatment [52, 58]. Nursing staff also used visual materials [55, 67, 69] and demonstration [55, 66, 67, 69]. However, chronically ill adults felt that there was a lack of demonstration in counseling [51]. Chronically ill adults also suggested ways to develop counseling methods, including the opportunity to contact counselors by phone [43, 53, 62, 70], internet [43, 62] or e-mail [62].

Several challenges were apparent in the implementation of counseling, e.g., due to differences in staff and patients' perspectives and problems with documentation. While chronically ill adults wanted counseling about what the future would hold, staff found it difficult to make prognoses [70]. Staff also believed that chronically ill adults sometimes had overoptimistic perceptions of their disease [59]. Staff were at times frustrated by what they perceived as a lack of understanding of counseling on the part of chronically ill adults [64]. The ability of chronically ill patients to fit counseling around their daily life proved to be a significant barrier [64]. Other problems included feeling defensive and experiencing self-blame [68], memory loss [70] and an inability to accept information [65]. The implementation of counseling was not always noted on the nursing plan, causing discontinuity in counseling [44, 66, 70].

3.5 Impacts of counseling

The impact of counseling included the following issues: compliance with medication, coping with feelings, understanding of the disease and quality of life. People who received counseling about their medication were committed to the treatment of their disease [42, 68]. Chronically ill adults receiving counseling were less distressed, suffered less from anxiety and felt more secure [52, 58, 68] and expressed more satisfaction with their quality of life [40, 48, 67]. A clear understanding of the causes of the disease and its severity made the daily life of those with chronic illness easier [44]. They were more compliant with self-management [42] and showed active participation in their care [65, 69]. The ability to control symptoms and manage their daily life instilled confidence [52, 58] and enabled them to make healthy choices in their life [58] (see Table 5).

Table 5. Narrative synthesis of impacts of counseling

Disease	Impact of counselling
Diabetes disease: Anderson-Loftin & Moneyham 2000	Coping with feelings
Rheumatoid arthritis / arthritis: Viller 1999, Ashe 2005	Compliance of medication, coping with feelings
COPD disease: Zakrisson & Hagglund 2009	Compliance of medication, coping with feelings
Asthma disease: Zakrisson & Hagglund 2009	Compliance of medication, coping with feelings
Diabetes disease: Anderson-Loftin & Moneyham 2000, Iversen & Hanestad 2005	Quality of life
Asthma disease: Raynor 2004	Quality of life
COPD disease: Lund 2006	Quality of life
Rheumatoid arthritis / arthritis: Ashe 2005	Quality of life
Chronic back pain: Laerum 2006	Knowledge of disease
Rheumatoid arthritis / arthritis: Viller 1999	Knowledge of disease
Heart disease: Eldh 2006	Knowledge of disease

4 Discussion

Despite chronically ill adults being affected by different diseases, their counseling needs appeared to be similar. They need an understanding of their disease and how to manage the disease at home in their everyday life [15-17]. Most need counseling about the disease and its symptoms, medication, physical activity and nutrition. In addition, according to our results, there were some special requirements for counseling such as information about social services, understanding about changes in lifestyle and knowledge about the future progression of the disease. The results of this study demonstrate that counseling did not meet all the needs of chronically ill adults. Although they were able to put much of the counseling into practice in their daily lives, social and emotional support tended to be overlooked in counseling. There was evidence that the outcomes of counseling were poorer where the counseling was based on the staff's understanding of needs, rather than that of the chronically ill adults [14, 16, 20].

According to our results, help with handling emotions was a common counseling need of chronically ill adults in all disease groups. Most described various feelings such as loneliness, depression and anxiety. Some research has shown that positive interaction which enabled chronically ill adults to ask questions and receive emotional support increased their self-confidence and feelings of security [12, 21]. However, for most of the disease groups counseling was imposed on chronically ill adults rather than being agreed with them, and was not always carried out in a positive atmosphere for discussing emotions.

The importance and benefits of patient counseling have been studied for some time [14, 17, 28]. This review provides evidence that counseling is not consistently realized in nursing care and is frequently not implemented in a patient-centered way. There were few references to the implementation of counseling based on care plans and little evidence that counseling goals were planned in conjunction with chronically ill adults [43, 51, 67-69]. In addition to checking chronically ill adults' understanding of the counseling, staff should seek feedback from patients on the counseling goals. Well-planned counseling should be allocated adequate resources and carried out using appropriate methods to support chronically ill adults' comprehension. The personal characteristics and attitudes of staff towards chronically ill adults are also important, as well as how they translate their knowledge into practice which is relevant to the daily lives of chronically ill adults. The early study was reported, persons who were given conflicting knowledge were less adherently to their medication and they had difficulties in self-management [71]. It is also staff attitudes and personal characteristics towards chronically ill and how they "translate" knowledge into practice of chronically ill daily lives and contexts.

Counseling of chronically ill adults has an impact on important aspects of their daily lives, including their feelings, medication, quality of life and knowledge of their disease. Given the clear evidence that counseling centered on the needs of chronically ill patients produces positive outcomes, it is a matter of concern that a large proportion of counseling does not take account of these needs [48, 66, 70]. This review has described the results of general studies in this area, but more detailed research is required.

This review aimed to describe counseling within healthcare settings for chronically ill adults in general. It has identified a number of factors which contribute towards effective counseling, regardless of the disease that is affecting the patient. These factors should help to inform staff on how to deliver effective counseling with marginal resources. Although there are different approaches to delivering counseling in healthcare, the results of this review are applicable to many different healthcare settings.

5 Limitations of the study

This review focused on the results of empirical studies of the counseling needs of chronically ill adults, the implementation of counseling and its impact. Although multiple research designs were included in the review, most of the studies were qualitative and the content of the quantitative studies was largely descriptive. The review was carried out by several researchers, reducing subjective selection bias and increasing the relevance of the study [37, 72]. In particular, three researchers independently reviewed the titles, abstracts and full texts, and two of the researchers assessed the quality of the studies to minimize selection bias. The use of robust criteria for quality assessment increases the validity of the conclusions drawn from the review. However, there is no definitive list of criteria to assess methodological validity [38, 72]. This study used the Joanna Briggs Institution's critical appraisal instruments (qualitative-, descriptive- and cohort studies) to assess methodological validity. Before using the instrument, the researchers discussed how they understood methodological questions. This literature review adhered to ethical research principles. The team of researchers, who have experience of counseling and working with chronically ill adults, made every effort to remain objective during the review; however, it is still possible that bias may have affected the review.

This review has some limitations. One possible limitation was the definition of the concept of counseling. As there was no commonly accepted definition of counseling, this study used a wide range of keywords relating to counseling. However, it is possible that some relevant studies were missed in the computerized search and the search of the library collection. Only original studies were included and the grey literature was excluded. Furthermore, only studies published in Finnish, Swedish or English were selected, raising the possibility that relevant research in other languages was omitted. However, the subject headings (MESH-terms) and search combinations were broad and based on consultation with a librarian. The selected studies have some limitations in their transferability and generalizability. However, for the purpose of this review, the original studies provide valuable information on chronically ill adults' counseling needs, and the implementation and impact of counseling in Western countries. It is possible that the author's background in nursing counseling may have had an effect on this study. However this was taken into account and consultation with other researchers was carried out to minimize this effect. The approach of this review in considering the counseling of all adults with chronic illness regardless of their disease may be considered a limitation. However, Tables 3-5 demonstrate that the key elements of counseling are very similar in each disease group.

6 Conclusions

The results of this review show that chronically ill adults have a variety of counseling needs and that the implementation of counseling does not always respond well to those needs. In particular, counseling for chronically ill adults should include information on social services, social and emotional support, and help with handling emotions. Although the chronically ill adults in the research reviewed had different diseases, expectations of counseling were nearly same similar across a variety of disease groups. Planning counseling beforehand and setting goals in conjunction with chronically ill adults helps to make counseling more patient-centered. This literature review also shows that staff need training in the counseling needs of chronically ill adults and the methods required to implement counseling.

Contributions

Study design: PK, MK, LP-P, HK. Data collection: PK, MK, LP-P. Analysis: PK. MK. Manuscript preparation: PK, MK, HK.

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