



FACULTY OF HEALTH AND OCCUPATIONAL STUDIES  
Department of Health and Caring Sciences



NURSING DEPARTMENT,  
MEDICINE AND HEALTH COLLEGE  
Lishui University, China

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# Support interventions and effects of them on elderly with depression

A descriptive literature review

Feng Wenting (Kira F)

Wu Siyu (Zoe)

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Supervisor: Zhao Lei (Charlie)

Examiner: Marja-Leena Kristofferzon

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## **Abstract**

**Background:** Nowadays, the high rate of elderly with depression had been found in nursing care and the depression was not effectively treated in most cases. Depression affected the quality of life of the elderly. Appropriate support could positively affect the depression of the elderly.

**Aim:** To describe support interventions and effects of them provided for elderly with depression. The aim was to describe the method of selected articles' data collection.

**Methods:** Selected articles with quantitative and mixed approaches. Eight scientific articles were searched for in the database PubMed and two scientific articles were selected by manual search of reference. The similarities and differences regarding the results could be identified in the chosen articles.

**Results:** Interventions included psychological support, physical activity, medication care, education and effects of support which had been proved beneficent for older people with depression were presented. The data collection methods were described in detail in the study.

**Conclusions:** The results of this study supported the use and effects of psychological interventions, physical activity, medication care, education that help nurses to had more effective interventions on elderly patients with depression. However, the gaps in the literature provided insights into further research.

**Keywords:** Aged, Depression, Nurses, Intervention.

## 文摘

**背景:**目前，老年抑郁症患者的高发病率在护理中已经发现，在大多数情况下抑郁症并没有得到有效的治疗。抑郁影响老年人的生活质量。适当的支持可以积极地影响老年人的抑郁情绪。

**目的:**描述老年抑郁症患者的支持干预措施及其效果。目的是描述选定文章的数据收集方法。

**方法:**选择的的文章有定量和混合性的方法。在数据库 PubMed 中搜索了 8 篇科学文章，并通过人工检索的方法选择了两篇科学文章。在选定的文章中可以识别出关于结果的相似点和不同点。

**结果:**干预包括心理支持、身体活动、药物治疗、教育和支持的效果，这些支持对老年抑郁症患者是有益的。本研究对数据采集方法进行了详细的描述。

**结论:**这项研究的结果支持了心理干预、身体活动、药物治疗、帮助护士对老年抑郁症患者采取更有效干预措施的使用和效果。然而，文献的空白为进一步的研究提供了见解。

**关键词:**老年人，抑郁，护士，干预。

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## **1. Introduction**

### **1.1 Definition**

#### **1.1.1 Elderly**

Aging is a normal process on human-being in many different age groups. An increasing number of countries are experiencing the aging tendency of population. As the age grows, the decrease of the body function and the rising incidence of diseases will appear (Iden *et al.*, 2011). Older adults have different lifestyles than adults. For example, older people are more likely to feel loneliness (Weissman *et al.*, 1996).

Elderly is defined by Dhara and Jogsan (2013) that aging as the elements of time living. Aging begins from conception, it's termination can't be considered with the specific age, but aging is opposite to the death. Elderly may best be defined as the survival of a growing number of people who has completed the traditional adult roles of making a living and child bearing (Alexopoulos, 2005). Therefore, physiologically aging is characterized by diminishing of bodily functions (Dhara &Jogsan, 2013). Many researchers have classified people aged 60 and above as elderly (Dhara &Jogsan, 2013; Alexopoulos, 2005; Iden *et al.*, 2011).

#### **1.1.2 Depression**

Depression is a disorder that may cause changes in the physical, psychological, hormonal and the social condition, which is characterized by significant and persistent low mood (Weissman *et al.*, 1996). Depression is an aversion to activity that affects one's behavior, feelings, thoughts, and happiness (Josefsson *et al.*, 2014). Prolonged mood upset, environmental impact and social stress, these stimulating factors will gradually make people evolve into depression (Sandra, 1997). Depression not only includes upset, but also has many other symptoms. People may lose interests in activities which are once favorite, they will have problems on concentrating things or making decisions, experiencing relationship difficulties (Sandra, 1997). People with these condition will feel anxious, helpless and other negative emotions, they even tend to commit suicide (Josefsson *et al.*, 2014). Basically, the depression of mood is not always commensurate with its situation (Dhara & Jogsan, 2013). Depression of mood can range from depressed

to sadness, low self-esteem, depression, or even pessimism, or suicide attempt and behavior (Iden *et al.*, 2011).

### **1.1.3 Support**

Support is someone or something who provides emotional help and encouragement (Iden *et al.*, 2011). Supportive care includes providing emotional support informally or through structured interventions (Josefsson *et al.*, 2014). Patient receives kinds of interventions from the nurses in order to recover quickly. Support interventions include general counselling, active listening and presence, like mood and other issues. It can be provided by nurses or supported by peer groups (Alexopoulos, 2005). Interventions can be provided by one-to-one personalized sessions, support group meetings, or specific interventions with caregivers and families, etc. Support can be provided by telephone, physical presence, or in a line group, which can be recommended by professionals (Dhara & Jogsan, 2013).

## **1.2 Description of depression**

### **1.2.1 Risk factors**

There are many factors that can cause depression, including physical and psychological conditions. Diseases such as stroke, heart disease, cancer, Parkinson's disease, and hormonal disorders increase the risk of depression (Iden *et al.*, 2011). Chronic diseases is a major factor which can related to depression (Iden *et al.*, 2011; Josefsson *et al.*, 2014). People with low self-esteem, they always look at themselves and the world with a pessimistic attitude. People who are easily overwhelmed by stress, may be inclined to depression (Josefsson *et al.*, 2014). People with a family history of depressive disorders tend to be at increased risk of developing depression (Weissman *et al.*, 1996). Loss of a spouse causes a heavy impact on health. Being left alone often prevents persons from enjoying life because they might suffer by using multiple medicines, retirements, financial crisis, fear of death, bereavement to worsen the situation (Alexopoulos, 2005). Iden *et al.* (2011) had observed that those who divorced or separated were more likely to be depressed than those who were married. Among the elderly, depression often occurs

in other diseases and disabilities and lasts longer. What's more, depression reduces the ability of the elderly to recover soon (Dhara & Jogsan, 2013; Weissman *et al.*, 1996).

### **1.2.2 Clinical treatment**

The antidepressant medication is used to treat the depression in patients in clinical nursing, although high percentage of patients still suffers a long term (Josefsson *et al.*, 2014).

The antidepressant medication, psychological treatment and physical activities are the most commonly used ways to treat the elderly patients' depression (Josefsson *et al.*, 2014). Depression is often treated with medication or psychological treatment or a combination of both (Josefsson *et al.*, 2014). There are many kinds of antidepressant medication that have different effects. The psychological treatment mainly adopted the cognitive therapy, family support and the behavioral therapy (Iden *et al.*, 2011). And the physical activities could reduce the stress, relax the patients and decrease the depressive symptoms (Josefsson *et al.*, 2014; Iden *et al.*, 2011; Weissman *et al.*, 1996).

## **1.3 Depression among elderly**

### **1.3.1 Elderly having depression**

Aging can be defined in terms of the biology referring to “ the regular changes that occur in mature genetically representative organism living under reprehensible environmental conditions as they advance in chronological age” (Dhara &Jogsan, 2013, p118). Due to body changes in the elderly, they are expected to slow down, so nurses, doctors and the old people's families may miss out on the single of depression. Therefore, effective treatment is often delayed, forcing many older people to fight depression unnecessarily. Thus over time, the elderly will come up with negative emotions, formatting of depression. According to Kalpan and Shaddock (1996), 15 to 20% of old population in the world experienced depression. Geriatric depression is a major health hazard with devastating outcomes. Major depression affected an estimated 1 to 4% of the older adult population (Alexopoulos, 2005), however, major depression affects older adults living in nursing homes disproportionately. Approximately 20.3% of older adults in nursing homes were affected by major depression (Alexopoulos, 2005). Depression in

old age is quite complex and difficult to be diagnosed because of medical illnesses, dementia syndromes and heterogeneity of patients in the population (Dhara & Jogsan, 2013). Depression refers to a heterogeneous set of phenomenon, ranging from simple mood swings to severe effective state (Weissman *et al.*, 1996). Most cases had a tendency to relapse, and most of the episodes could be alleviated, and some of them may have residual symptoms or become chronic (Weissman *et al.*, 1996). The majority of elderly people, because their children grown up and went out for work, which contributed to the elderly lack the companionship of their family members (Alexopoulos, 2005). As the elderly grow older, the social support systems will be lost because of the death, retirement or relocation of a spouse or sibling (Dhara & Jogsan, 2013). Therefore, effective treatment is often delayed, forcing many older people to fight depression unnecessarily. Thus over time, the elderly will come up with negative emotions, formatting of depression.

### **1.3.2 Epidemiology**

Depression in elderly patients is a common mental illness. A study in America found that depression was widely distributed in the elderly population (Kessler *et al.*, 2003). During 2001-2002 estimated through calculation that in the past year, 6.6% of American elderly had experienced the depression (Kessler *et al.*, 2003). Copeland *et al.* (2004) found that the depression happened in Europe elderly ranged from 26%-40%. In Hong Kong, 9.7% of 55946 elderly people among community cohort suffered from depression (Sun *et al.*, 2011).

Lim *et al.* (2011) found that there were fewer elderly with severe depression in China compare to the western countries, but the prevalence rates of depressive symptoms was similar to most western countries. Depression among elderly was a common condition in most parts of the world, the International Symposium on the treatment of Depression in London warned that depression would surpass cancer in the next 20 years and became the second-largest disease in the world after heart disease (Sandra, 1997).

### **1.4 The nurses' role**

Nursing is one of the four meta-paradigms in nursing, together with people, environment and nursing (Raile & Marriney, 2014). The nurse is a provider of independent teaching and research and self-care practices in health sciences (Mcewen &

Wills, 2011). Older adults are also less expectant of finding purpose in life as they age, so they will even stop looking for new sources of goals (Alexopoulos, 2005). The lack of a sense of purpose is related to feelings of despair and depression. Nurses can be a guider and adviser to lead or observe elderly patients straightly. The communication between each other could channel patients to have positive attitudes (Iden *et al.*, 2011). When nurses care the elderly, nurses should not only pay attention to their physical health, but also take care of their mental health. In a way, nurses are the first professional observer when the patient's condition changes (Alexopoulos, 2005).

### **1.5 The theory of nursing**

The Tidal Model of Mental Health Recovery is a recovery model for the promotion of mental health developed by Phil Barker (Raile & Marriney, 2014). It focused on the changing processes inherent in people with mental health. Barker mentioned mental illnesses or psychiatric disorders were problems of human living. He suggested that nurses could help people learning from reality, which was the reality of experience (Raile & Marriney, 2014). The condition of an elderly person with depression was as fluid as the flow of water, although the change was small (Raile & Marriney, 2014). They need recuperation, guidance, support and help from nurses. It aimed to encourage people to find their own recovery rather than being directed by professionals (Patricia, 2009). The authors' understanding of theory could better describe support interventions and effects of them provided for elderly with depression.

### **1.6 Problem statement**

The numbers of older population in both developed and developing countries have increased in the 21<sup>th</sup> century. As the living environment changes, the physical and psychological changes of the elderly are not taken seriously because of many factors that lead to depression. The nurses have responsibility to consider this problem together with the patients' family and relatives. The present study can improve knowledge about the support interventions and effects can provide for elderly people with depression in nursing care, which can generate better nursing care, reduce the suffering and improve their quality of life.

## **1.7 Aims and specific questions**

The aim of the present literature review was to describe support interventions and effects of them provided for elderly with depression. Moreover, the aim was to describe the procedures of data collection used in the selected articles from a methodological perspective.

Question 1:

–What kind of support interventions are provided for elderly people with depression?

Question 2:

–What effects of the support interventions are described?

Question 3:

–What kinds of data collection method are used in included scientific articles?

## **2. Methods**

### **2.1 Design**

The authors' study was a descriptive literature review (Polit & Beck, 2012).

### **2.2 Databases**

Systematic searches for selecting articles had been used on the database PubMed. Polit and Beck (2012) mentioned it was a useful database when it came to data collection within caring research.

### **2.3 Search terms, search strategies and selection criteria**

The following search terms were used when searching articles for the study: Depression (Mesh), Support (Free Text), elderly (Free Text), Nurses (Free Text), Aged (Free Text) and intervention (Free Text). The search terms identified in this way were used one after

another and were combined in different combinations to produce a result related to the aim of the study. Terms were combined by Boolean operators “AND” and “OR” (Polit & Beck, 2012).

In order to obtain more relevant articles related to the aim, limitations were used in the search process. In PubMed the following limits were used: *Published Date: 2007-01-01-2017-12-31, University of Gävle, English, Humans, Full text*. In order to clarify the selection process and to make the outcome of the database searches clearly, Polit and Beck (2012) recommended using inclusion and exclusion criteria, which were presented below.

**Inclusion criteria:** The target population included elderly patients with depressive symptoms. Articles used were all regarding to the aim. The articles found that were empirical study with quantitative or mixed approaches.

**Exclusion criteria:** Articles that were not relevant to the present review’s aim, articles didn’t follow (containing Introduction, Methods, Results and Discussion) IMARD. Which was also recommended by Polit and Beck (2012). Articles that were not available for free in the University of Gävle were not included. The study that examined patients whether they had depression disorders would not be considered.

## **2.4 Outcome of database searches**

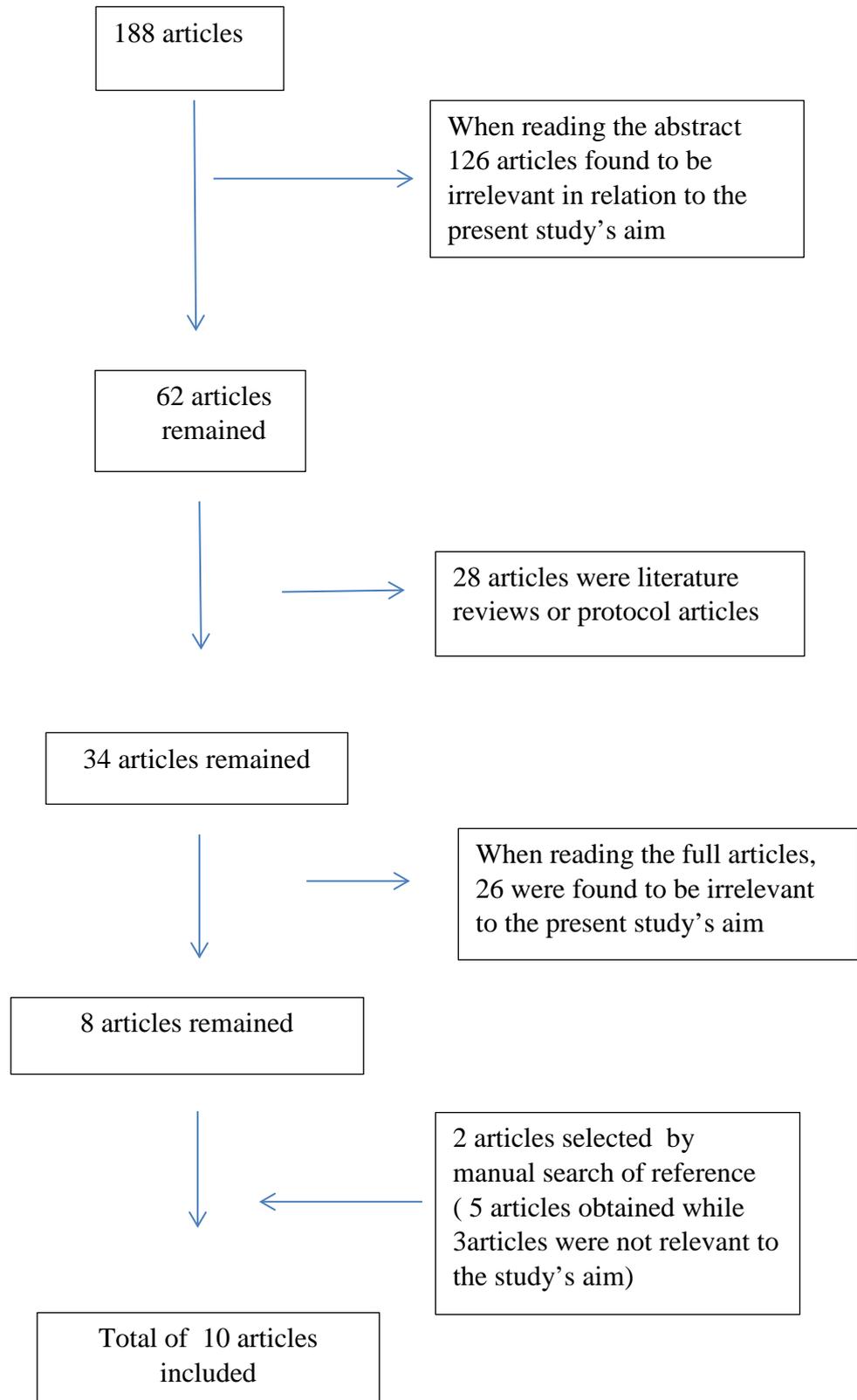
The initial search process found a total of 188 hits. Selecting process (figure 1) established a simplified search process to minimize the risk of errors and deviations to ensure that all relevant studies were included.

Firstly, there were enough scientific studies (n=188) in the chosen topic could be found in PubMed. Secondly, the titles and abstracts of the articles were scanned thoroughly in order to sure the articles related to the research questions or aims of the study. 188 studies were selected by comparing the titles and abstracts (n = 126) against the aim and inclusion criteria. Thirdly, the authors read the articles’ design and approach, 28 articles which were literature reviews or protocol were excluded. Finally, the authors read the full articles, 26 articles were found irrelevant to the present study’s aim. However, the authors realized the amount of articles obtained was small, then discussed this problem with partners and

supervisor. After discussion, the authors used manual search of reference which related to inclusion criteria and specific questions. The authors read the reference lists in selected articles (n=8) according to the inclusion criteria then found five articles form manual search. Then the authors read the full articles (n=5), two articles which were relevant to the study's aim selected. The outcome of the performed database searches were shown in table 1.

**Table 1: Outcome of database searches.**

Database + date of research	Limits	Search terms	Number of hits	Potential articles (excluding doubles)
PubMed 2018-01-28	Published Date: 2007-01-01-2017-12-31, University of Gävle,  English, Humans, Full text	“Depression” [Mesh] AND (“Elderly” [Free text] OR “Aged” [Free text]) AND “Nurse” [Free text] AND (“Support” [Free text] OR “Intervention” [Free text])	188	8
Manual search of reference 2018-01-28	Published Date: 2007-01-01-2017-12-31, University of Gävle,  English, Humans, Full text	Relevance for inclusion criteria, aim and specific questions	5	2
			193	Total: 10



**Figure 1:** Exclusion process of articles

## **2.5 Data analysis**

The results sections of the selected articles were related to the question 1, question 2 and question 3. All articles were read separately and summarized during discussion. In order to describe the included articles, two tables were presented. Through Appendix 2 (table 3) the authors answered question 1 and question 2. Question 3 could be answered by Appendix 1 (table 2). The result summarized the current study's specific questions and focused on methodological concerns. Using themes and tables were great ways to analysis, which made the summary of the article clearer (Polit & Beck, 2012). After comparing the similarities and differences of the original articles, five themes were emerged. Appendix 1 (table 2) summarized authors, title, design and approach, sample (Number and age), data collection method and method of data analysis included. Appendix 2 (table 3) presented the selected articles' authors, aim and results (support & effects of support).

## **2.6 Ethical considerations**

The results fully presented and the authors didn't change these facts according to their own ideas. The current study based on published materials and had been reviewed for ethical approval. Therefore, the authors would read the articles rationally and analyze the content of the article. This meant that articles' ideas would be used to ensure that there is no plagiarism. In the process of analyzing and dealing with the articles, the authors had made several discussions and contributed to the presentation of objective results. References were written in standards when referred to the content. This was a working method recommended by Polit and Beck (2012).

## **3. Results**

The results were based on 10 articles. There were six quantitative articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lamers *et al.*, 2010; Lee *et al.*, 2015; Loka *et al.*, 2017; Proctor *et al.*, 2014). Four of selected articles (Clignet *et al.*, 2016; Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013; Wilson *et al.*, 2010) used a mixed approach. In the mixed approach articles, the authors chose the quantitative method parts which related to the study's aim. The articles presented support interventions and effects of them provided for elderly with depression. Themes with subheadings were presented in Figure 2. The

results related to methodological aspects were presented in table 2 and in table 3. According to methodological questions, the authors also had described the selected articles' data collection methods. The articles on which the result was based was marked with an asterisk (\*) in the reference list.

<b>Support interventions</b>	<b>Effect of the support</b>
-Psychological support	-The effect of psychological support
-Physical activity support	-The effect of physical activity support
-Medication care support	-The effect of medication care support
-Education support	-The effect of education support
-Other support	-The effect of other support

**Figure 2: The themes and subheadings of the results**

### **3.1 Support interventions**

By analyzing and summarizing different articles, the author found out and classified intervention in support of elderly patients with depression.

#### **3.1.1 Psychological support**

There were three articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Vandermeulen *et al.*, 2013) described the psychological support on monitoring emotion. Two articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010) introduced the support that elderly patients to record their emotion condition per day, and they held the nurse's meeting in different ways. In the Lamers *et al.* (2010)'s study the patients received 2-10 visits in the period lasted most 3 months (averagely received four intervention visit, each last about one hour). Clignet *et al.* (2016) had weekly meeting between the Elderly patients and a nurse, talking about Elderly patients' emotional situation (lasted 7 weeks), nurse coached the patients individually once a week with a session lasting 45-60 minutes. Vandermeulen *et al.* (2013) didn't make the elderly patients record the emotion per day but had a counseling session that completed at home. Elderly talked about their mood and emotional distress.

### **3.1.2 Physical activity support**

Two articles (Aakhus *et al.*, 2016; Loka *et al.*, 2017) mentioned the intervention about the physical activities. Askhus *et al.* (2016) organized the regular social contact with trained medical students for elderly patients, and provided the counseling about the structured physical activities program which provided for the group or individual. Then the nurses would have a communication within one hour. The Loka *et al.* (2017) had the Physical Activity Program which was designed into three parts: 10 minutes' warm-up activities, 20 minutes' rhythmic exercises, and 10 minutes' cool down exercises. The program lasted 10 weeks and the group participants took part in the program four days per week.

### **3.1.3 Medication care support**

Three of the articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Markle-Reid *et al.*, 2014) showed the medication support for elderly patients with depression.

In Aakhus *et al.* (2016)'s study, they described that during one-month trial, nurses routinely conducted one-hour daily communication with elderly patients who suffered from depression. During the course of experiment, patients were given daily oral antidepressants. The response of older patients taken antidepressant medications was observed under moderate or severe depression.

In Bruce *et al.* (2016)'s article, they indicated that nurses instructed elderly patients to take oral antidepressant medications on time during home visits. In their article, they recommended elderly depression patients to take medicine for a year. The side effects would be monitored weekly lasting 2 weeks.

In Markle-Reid *et al.* (2014)'s study, they concluded during a one-year family visit, registered nurses screened patients about depressive symptoms, risk factors, medication therapy and antidepressant management. Then nurses instructed elderly patients to take medications on time. Nurses conducted medicine screening and supported elderly with antidepressants management. Moreover, nurses monitored the using of medicine and side effects, suicidal ideation and risk.

### 3.1.4 Education support

There were five articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Proctor *et al.*, 2014) that offered education to elderly patients or the family caregivers.

In Aakhus *et al.* (2016)'s study, nurses with medical teams provided a comprehensive website which lasted one hour to introduce information. The courses included recommendations and potential evidence for diagnostic or therapeutic tools. All the educational resources were available for health care professionals and residents of urban intervention. The website provided courses and self-learning programs based on cognitive behavior, such as literature or web-based courses. It educated coping strategies and problem-solving therapies for depression. Professionals developed appropriate educational programs, providing cooperative care for patients with moderate or severe depression. The plan not only described the responsibilities and communication between professionals and the patient, but also primary care and specialist care. Primary care physicians or qualified health care professionals provided suggestions for older patients.

Bruce *et al.* (2016) described that nurses followed the guidelines about the management of depression care, beneficiaries and family education, instructed and assisted in the formulation of short-term functional or behavioral goals based on the patient's degree of depression. The material of Education Guide Patients suggested that depression was a medical disease, rather than personality defects. It helped elderly correct depression from misunderstanding with the treatment process.

Lee *et al.* (2015) described the intervention about the family support. Nurses educated the elderly patients to live with their relatives, getting family support in daily life. Nurses educated the family members to pay attention to elderly patients' depressive symptoms in time and learn how to control .

Markle-Reid *et al.* (2014) educated the client and family caregiver about depression using printed educational materials that contained symptoms of depression, regular medication on the importance of depression and other related measures.

The nurses educated the knowledge of depression like in the meeting (Proctor *et al.*, 2014). The elderly patients, their relatives and the family caregivers could improved perception about the depression after education. Nurses would visit the elderly patients'

home per week to provide the advice or educate other things that the patients needed about depression.

### **3.1.5 Hope support**

Wilson *et al.* (2010) had a hope intervention on elderly patients each weekday. Nurses gave a hope card including positive messages and pictures to patients. Then nurses let patients give the feedback about the card, the process lasted four weeks.

## **3.2 The effect of the support**

Below were the categories and effect of the support interventions.

### **3.2.1 The effect of psychological support**

The depressive symptoms decreased significantly after the intervention in the articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Vandermeulen *et al.*, 2013). Most of the elderly patients affirmed that intervention was useful, and they were willing to finish the plan with the positive attitudes. Vandermeulen *et al.* (2013) found when elderly patients talked about their emotion condition, becoming quite open and frank. But a minority of patients considered the plan was a waste of time.

### **3.2.2 The effect of physical activity support**

Aakhus *et al.* (2016) and Loka *et al.* (2017) found that the physical activities had significant decrease on depression. Most of the elderly patients considered the program was useful. Aakhus *et al.* (2016) described the elderly patients' improved the quality of sleep and the loneliness was reduced. Loka *et al.* (2017) not only found decreasing on depressive symptoms but also realized that the physical activities program had a multiple positive effect on body such as the vitality, pain physical role and physical health. It could further improve the quality of life.

### **3.2.3 The effect of medication care support**

Three of articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Markle-Reid *et al.*, 2014) reached a common conclusion that depressive symptoms were controlled and reduced, medication compliance was partially improved.

According to the Aakhus *et al.* (2016)'s conclusion, they indicated that the combination of antidepressant and psychotherapy should be provided, because the difference in medicine compliance in the intervention group decreased markedly (moderate depression). At the same time, the elderly patients with medicine counseling had an increase of compliance. In Bruce *et al.* (2016)'s study, the medication management could decrease and control the depression symptoms, it also promoted adherence. The final observation found that the side effects of antidepressants were not serious, they appeared only a few days after the patient's first dose. But after continuing or increased measurement, the adverse reactions were temporary and resolved in a matter of weeks. They also described that treating depression required changing the dosage of the medicine, sometimes fatigue or loss of appetite was a normal occurrence (Bruce *et al.*, 2016). The results of Markle-Reid *et al.* (2014)'s study concluded after treatment with medicine management, the depressive symptoms of older patients were controlled. What's more, older patients admitted that registered nurses improved their knowledge of the assessment and management of depression.

### **3.2.4 The effect of education support**

Aakhus *et al.* (2016) realized that after the implementation of education program and plans, elderly people and their families had improved their awareness of depression, emotion of panic was reduced and known the importance of taking medications on time. Patients with a significant increased compliance after treatment. Bruce *et al.* (2016) indicated that the adherence of elderly in the setting of goals promoted the treatment of depression by professionals. And the basic clinical activities of education and goal setting brought overall happiness to the forefront, and prompted clinical and psycho-social responses and reduced the risk of hospitalization. The article (Bruce *et al.* 2016) concluded education activated the patient's enthusiasm for treating the disease. Lee *et al.* (2015) showed the elderly patients with family support had a decrease on depressive symptoms. The patients felt encouragement when the family had the positive interaction with them. Patients considered that the family support was meaningful. The conclusions of two articles (Markle-Reid *et al.*, 2014; Proctor *et al.*, 2014) showed that the compliance of the patients with senile depression after education support had significantly improved, and the family members were more concerned about the patients than before. It also

showed that education reduced hospitalization costs in a way. Patients' self-management consciousness had been improved.

### **3.2.5 The effect of hope support**

The elderly patients with hope intervention didn't prove the positive effect for reducing depression and raising hope (Wilson *et al.*, 2010). The participants mentioned that the intervention took much of the time, they felt tired, and there were a few participants dropping out of the study (Wilson *et al.*, 2010).

### **3.3 Results regarding the chosen articles' data collection methods**

After scrutinizing six quantitative articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lamers *et al.*, 2010; Loka *et al.*, 2017; Lee *et al.*, 2015; Proctor *et al.*, 2014) and four mixed approach articles (Clignet *et al.*, 2016; Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013; Wilson *et al.*, 2010) included in the study, the authors summarized the data collection methods. In mixed approach articles, the authors chose the quantitative method parts which related to the study's aim.

**Questionnaires:** In selected articles, the specific scales measured the depressive symptoms directly. The generic scales measured the holistic health, and the authors chose the part of depressive symptoms.

**1) Specific scales:** Nine articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Clignet *et al.*, 2016; Lamers *et al.*, 2010; Loka *et al.*, 2017; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013; Wilson *et al.*, 2010) used the specific scales. There were three articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Loka *et al.*, 2017) used the Beck Depression Inventory (BDI). Two articles (Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013) used the Centre for Epidemiological Studies-Depression Scale (CES-D). Aakhus *et al.* (2016) used the Hospital Anxiety and Depression Scale (HADS). Bruce *et al.* (2016) used the Hamilton Depression Rating Scale (HAM-D). Lee *et al.* (2015) used a shorthand tool developing by the Korean Geriatric Depression Scale (GDS-K). Wilson *et al.* (2010) used the Geriatric Depression Scale Long Form (GDS-L) and Geriatric Depression Scale Short Form (GDS-S).

2) Generic scales: Six articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lamers *et al.*, 2010; Loka *et al.*, 2017; Proctor *et al.*, 2014; Wilson *et al.*, 2010) used the generic scales. Different articles had the different generic scales. Aakhus *et al.* (2016) used Clinical Global Impression Improvement Scale (CGI-I) and Patient's Global Impression of improvement Scale (PGI-I). Bruce *et al.* (2016) used 9-item Patient Health Questionnaires (PHQ-9). Lamers *et al.* (2010) used the Physical Component Score (PCS) Mental Component Score (MCS) of the Short Form 36 (SF-36). Loka *et al.* (2017) used the Short Form 36 (SF-36) Quality of Life (QoL) Scale. Proctor *et al.* (2014) used the Crichton Royal behavioral rating scale (CRBRS). Wilson *et al.* (2010) used the Hearth Hope Index (HHI).

**The people who conduct the data collection:** In three articles (Bruce *et al.*, 2016; Loka *et al.*, 2017; Wilson *et al.*, 2010) the data were collected by researchers, in six articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Proctor *et al.*, 2014; Vandermeulen *et al.*, 2013) by nurses. In one article (Aakhus *et al.*, 2016) the researchers and the trained medical students collected the data together.

**The place where data collection occurred:** The place where data collection occurred were different. In five articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013) the data were collected in the hospital. Bruce *et al.* (2016) collected the data at home. In two articles (Loka *et al.*, 2017; Wilson *et al.*, 2010) the data were collected in the nursing home and Proctor *et al.* (2014) collected the data at home or nursing home. Aakhus *et al.* (2016) didn't mentioned the place.

## 4. Discussion

### 4.1 Main results

The results showed that kinds of interventions and their effects support interventions and effects of them provided for elderly with depression. Major types of support intervention were psychological interventions, physical activity, medication care, education. The hope support didn't have positive effect. The effect of these support intervention were mainly on relieving the symptoms of elderly with depression. The data

collection methods for selected articles were clearly presented and were used the relevant scientific method.

## **4.2 Results discussion**

### **4.2.1 Psychological support**

Three articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Vandermeulen *et al.*, 2013) in the result proved that nurses' intervention which monitored emotional response had great effect on treating elderly with depression. The nurse is the most direct observer in nursing senile depression patients, nurses can detect abnormal condition of elderly patients in time. Also McCarthy-Zelaya (2017) found that lifestyle changed by emotional management were flexible. The article's (Mccarthy-Zelaya, 2017) result was similar to the articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Vandermeulen *et al.*, 2013) the authors' found. The using of emotional management was the psychological support for the elderly in daily life (Clignet *et al.*, 2016; Lamers *et al.*, 2010; McCarthy-Zelaya, 2017; Vandermeulen *et al.*, 2013). If depression was well supported, a good nurse-patient interaction could be negatively correlated with depression, which meant better nurses interaction with patients came with less depression (Clignet *et al.*, 2016; Lamers *et al.*, 2010; McCarthy-Zelaya, 2017; Vandermeulen *et al.*, 2013). Therefore, the authors thought it was meaningful for elderly patients with depression to receive emotional management therapy combined with nurses' active attention.

Psychological support in the treatment of elderly having depression was relevant to Barker's tidal model of mental health recovery (Raile & Marriney, 2014). The theory mentioned relying on the people's own strength to overcome the plight of reality (Raile & Marriney, 2014). The authors thought that the biggest dilemma for people with depression was to control their emotion. In particular, emotion had a great effect on elderly patients' adherence to treatment because of their sensitive feelings (Clignet *et al.*, 2016; Lamers *et al.*, 2010; McCarthy-Zelaya, 2017; Vandermeulen *et al.*, 2013). Thus, nurses should take responsibility to provide elderly the support of depression. The authors found that in certain cases, nurses may even use some emotional adjustment strategies to guide the conversation of depressed patients, to help them regain their lack of self-confidence and to discuss depression more accurately (Clignet *et al.*, 2016; Lamers *et al.*, 2010; McCarthy-Zelaya, 2017; Vandermeulen *et al.*, 2013). The authors believed that

psychological support played an important role in the treatment of depression in elderly patients.

#### **4.2.2 Physical activity support**

Two of articles (Aakhus *et al.*, 2016; Loka *et al.*, 2017) described that nurses' support on physical activity had a good effect of reducing the elderly depression symptom. The nurses could observe the emergency condition when elderly patients were outdoors, or nurses could ask them about their feelings after the activity is completed. Kittrell (2015) found that nurses' intervention of physical activity had a significant indirect effect on the effects of depression in older people, which could relieve symptoms of depression. The researchers found that physical activity was negatively correlated with the severity of depression (Kittrell, 2015). Comparing to the articles (Aakhus *et al.*, 2016; Loka *et al.*, 2017) found in the result, all of these articles described nurses' support of physical activity could promote elderly patients to the outside world and do exercises in order to strength the body function. What's more, physical activity with nurses intervention could record the patient's situation more accurately in time (Aakhus *et al.*, 2016; Loka *et al.*, 2017; Kittrell, 2015).

It was not difficult to understand that physical activities with nurses' support could reduce depressive symptoms, which meant that patients could control the condition (Aakhus *et al.*, 2016; Loka *et al.*, 2017; Kittrell., 2015). In authors' opinion, patients with nurses' support could get more courage to defence disease because physical activities obviously affect the reception of patients. Also as Barker's theory mentioned in the treatment process, the high degree cooperation patients meant more active, more conducive to the recovery of the disease (Raile & Marriney, 2014). The authors believed that physical activity combined with nurses' support was an effective, low-cost, universally safe management of depression.

#### **4.2.3 Medication care support**

Oestergaard and Møldrup (2011) described the medication management was considered as the first choice to treat the depression, which had a significant decrease impact on the depressive symptoms (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Markle-Reid *et al.*, 2014). In Barker' s theory, he thought that the intervention was a effective way to recover the mental health (Raile & Marriney, 2014), the nurse was a vital role to provide the intervention because they frequently contact to the elderly patients with depression.

The medication management had a significant effect when the patients take it regularly according to the doctor's advice. Many of the elderly patients with depression may forget to take it and then they didn't get a expectant effect (Oestergaard & Møldrup, 2011), further more, they wanted to give up the medication treatment. Some of the elderly patients with depression found that they didn't have improvement in a short time, then they wanted to waive the medication treatment as well (Oestergaard & Møldrup, 2011). The effect of nurses' role was to instruct the patient to take the medicine correctly. The nurses' intervention to promote the patients' adhere to the mediation was effective, the medication was a effective way to treat the depression with the patients' adherence after the intervention by nurses (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Markle-Reid *et al.*, 2014; Oestergaard & Møldrup, 2011).

#### **4.2.4 Education support**

Five articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lee *et al.*, 2015; Markle-Reid *et al.* 2014; Proctor *et al.*, 2014) found that the education used by nurses for elderly patients with depression had a positive effect on the decrease of depressive symptoms through different ways. For example, nurses had meeting with the elderly patients or guided the patients to read the books relate to the depression. The education on patients' relatives also had a positive effect on the decrease of depressive symptoms through enhancing the family support (Lee *et al.*, 2015; Proctor *et al.*, 2014). Sometimes, it's hard for elderly patients and their relatives to learn about the depression individually without the guidance of nurses. The Oestergaard and Møldrup (2011) also found the positive effect on decrease of depressive symptoms through the education by nurses. It could be verified by the theory who mentioned that some interventions is required for the patients to improve the knowledge of the diseases (Raile & Marriney, 2014).

Many patients hadn't accepted the education, they knew few about the depression. They felt confused and didn't know how to handle the kind of problems. The education could improve the elderly patients' knowledge about the depression effectively (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Proctor *et al.*, 2014; Oestergaard & Møldrup, 2011). After educated by nurses, the elderly patients could solve some emotional problems and manage their mood by themselves (Oestergaard &

Møldrup, 2011). Elderly patients would had a suitable way to control depressive symptoms after education.

#### **4.2.5 Hope support**

This kind of intervention didn't have a positive effect on depressive symptoms, some of elderly patients with depression thought the intervention was a waste of time, so they didn't want to finish it (Wilson *et al.*, 2010). The reason for non effectiveness about the intervention was multiple, the authors hadn't found other articles talk about the hope intervention. Therefore, the authors didn't have discussion about it.

#### **4.2.6 Discussion of the selected articles' data collection methods**

Quantitative data collection methods could help the researchers collect the data more structured and efficient (Polit & Beck, 2012).

**Questionnaires:** Questionnaire was a useful way to collect the data in quantitative articles, which consisted of a set of items like scales (Polit & Beck, 2012). Polit and Beck (2012) described the scales could be specific or generic. Compared to the interviews, questionnaires could cost savings. Different from the interviews, the questionnaires provided the possibility of anonymity, and it decreased the bias on interviews (Polit & Beck, 2012). The selected articles used different scales to measure the depressive symptoms.

Nine articles (Aakhus *et al.*, 2016; Bruce *et al.* 2016; Clignet *et al.*, 2016; Lamers *et al.*, 2010; Loka *et al.*, 2017; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013; Wilson *et al.*, 2010) used the specific scales which measured the depressive symptoms directly. Six articles (Aakhus *et al.*, 2016; Bruce *et al.*, 2016; Lamers *et al.* 2010; Loka *et al.*, 2017; Proctor *et al.*, 2014; Wilson *et al.*, 2010) used the generic scales to measure the holistic health for the patients. The generic scales could measure the holistic health, the researchers chose part of the scales which could show the changes about depressive symptoms (Polit & Beck, 2012). However, the specific scales were more flexible and effective, which reflected the patients' depressive symptoms, the collected data could presented the changes more directly (Polit & Beck, 2012).

**The people who conduct the data collect:** Three articles (Bruce *et al.*, 2016; Loka *et al.*, 2017; Wilson *et al.*, 2010) collected the data by researchers. Collecting the data by

researchers was a good choice to save money because they didn't need to pay for the training, but it would cost time for the researchers (Polit & Beck, 2012). Six articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Proctor *et al.*, 2014; Vandermeulen *et al.*, 2013) collected by nurses. It was convenient to select data by nurses, because they observed the patients frequently and professionally (Polit & Beck, 2012). In one article (Aakhus *et al.*, 2016) medical students and the researchers collected the statistics together. The medical students that they chose were trained, which could increase the reliability and availability of the collected data (Polit & Beck, 2012).

**The place where data collection occurred:** Five articles (Clignet *et al.*, 2016; Lamers *et al.*, 2010; Lee *et al.*, 2015; Markle-Reid *et al.*, 2014; Vandermeulen *et al.*, 2013) collected the data in the hospital, which was a good choice to save the time and money, the data collector could gather the information intensively. This way would make the data more authentic and comprehensive (Polit & Beck, 2012). Bruce *et al.* (2016) collected the data at home. Home was familiar to the patients, they felt ease during the data collection process. However, gathering information in different patients' homes would increase burden for researchers, spending time and energy on their destinations (Polit & Beck, 2012). Two articles (Loka *et al.*, 2017; Wilson *et al.*, 2010) were selected in the nursing home. To collect information from a nursing home, the researchers needed the consent of the nursing home's manager and the family of the patients. The article (Proctor *et al.*, 2014) occurred at home or nursing home. Aakhus *et al.* (2016) didn't mentioned about the place.

### **4.3 Methods discussion**

This study was a descriptive literature review which was a good way to summary and critique previous researches (Polit & Beck, 2012). The study described support interventions and effects of them provided for elderly with depression, the data collection method in 10 articles were also summarized.

All the articles had been searched in the PubMed with two different ways. Firstly, the authors used the search terms with the "AND" and "OR" to seek the articles with different combinations. Using one database was a limitation to found the enough amount of the

suiting articles (Polit & Beck, 2012). The authors used manual research of reference, reading the references lists in selected articles, then downloaded them which coincided the inclusion criteria and study's aim from the PubMed. Finally, the authors found six quantitative articles and four mixed approach articles, the authors chose the quantitative part of the mixed approach articles to explore their study. The authors conducted a methodical and systematic search of the studies in PubMed, developed strategies of information, recorded each step of the search process to ensure effective search and improved the quality of research (Polit & Beck, 2012).

The study used the concrete inclusion and exclusion criteria, which could help the authors to get the articles more quickly and accurately (Polit & Beck, 2012).

The study used several limits to find the suitable articles, but it also had disadvantages. The limit of the language was to use the English, English was not the mother language for the authors, which caused misunderstanding and omissions. The limit of time for years from *2007-01-01 to 2017-12-3*, it was an advantage to narrow the amount of the articles, the authors didn't need to select the appropriate articles in a huge amount of the articles (Polit & Beck, 2012). The authors used tables and figures in the study. The research methods and results were analyzed, this method made the data clearer and organized (Polit & Beck, 2012). It could show the study's aim clearly about the data collection methods, the support interventions and effects of them provided for elderly with depression. Subheadings used in order to get more accurate studies. This was a strength which more relevant in relation to the aim and research questions (Polit & Beck, 2012).

The authors had read the selected articles many times, it could reduce the possibility of missing information in the articles. The authors described the selected information objectively, didn't add any individual opinion which increased the credibility of the articles (Polit & Beck, 2012).

The articles used in this study were proceeded in many different countries: Norway, New York, Netherlands, California, Korea, Canada, America, and Netherlands. It increased the study's universality and credibility. It should be mentioned that there was a disadvantage for lacking of articles exploring in China in this study, it caused that the study have a small availability in China.

All selected articles in the present study had been approved an ethics committee, although different countries had different ways and criteria to judge. Researches in different countries made the results more feasible. It could show the universality and diversity and cultural information of different countries.

#### **4.4 Clinical implications**

This is a study to summarize the support intervention and effects of them provided for elderly patients with depression. Due to the high incidence of depression and the severe consequences of recurrent hospitalization, there is limited evidence of discharge management. Nurses' role is important in caring elderly patients with depression. It is obvious that there should be more requirements about the identification for effective supports and future design. High-quality randomized studies can reinforce the positive impact of supports on elderly patients with depression in nursing care. Authors recommend that different kinds of supports could be combined in different ways which could based on the patients' different condition, and then implemented by nurses.

#### **4.5 Suggestions for further research**

After completing the articles for the present study, it was established that no published Swedish study, which could answer the research questions. For future studies, the authors recommended that it was a good choice to pick single support to have an in-depth exploration and get a deeper finding to develop the support. The future researches could compare the different kinds of supports to get the more effective support. Comparing a single support with the structured support includes several different kinds of intervention will also be meaningful.

#### **4.6 Conclusions**

The results of this study supported the use of psychological interventions, physical activity, medication care and education that help nurses to have more effective interventions on elderly patients with depression. However, the gaps in the literature provided insights into further research. Nurses could generalize support intervention for

elderly to guide and care them. The nurses to play a vital role in providing the support for elderly patients with depression and to continue further research in this field.

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APPENDIX 1

**Table 2. Overview of selected articles.**

<b>Authors</b>	<b>Title</b>	<b>Design and approach</b>	<b>Sample (Number &amp; Age)</b>	<b>Data collection method</b>	<b>Method of analysis</b>
Aakhus <i>et al</i> (2016) Norway	A tailored intervention to implement guideline recommendations for elderly patients with depression in primary care: a pragmatic cluster randomized trial	Exploitative study with a quantitative approach	80 Norwegian municipalities 65 years or older	<b>Specific scales:</b> Hospital Anxiety and Depression Scale <b>Generic scales:</b> Clinical Global Impression Improvement Scale and Patients' Global Impression of improvement Scale	IBM the Social Sciences v.21 program windows intention-to-treat analysis
Bruce <i>et al</i> (2016) New York	Integrating Depression Care Management into Medicare Home Health Reduces Risk of 30- and 60-Day Hospitalization	Exploitative study with a quantitative approach	positive for depression (N = 755) and a subset who consented to interviews (n = 306) 65 and older	<b>Specific scales:</b> Hamilton Depression Rating Scale (HAM-D) <b>Generic scales:</b> 9-item Patient Health Questionnaire	exploratory analyses, Outcome and Assessment Information Set and T-test

Clignet <i>et al</i> (2016) New York	A Qualitative Evaluation of an Inpatient Nursing Intervention for Depressed Elderly: The Systematic Activation Method	Mixed approach	four clinical units groups includes 80 patients elderly patients (60 years)	<b>Specific scales:</b> Beck Depression Inventory was used to measure the depressive symptoms	thematic content analysis
Lamers <i>et al</i> (2010) Netherlands	A Minimal Psychological Intervention In Chronically Ill Elderly Patients with Depression: A Randomized Trial	Exploitative study with a quantitative approach	361 primary care patients. aged:60 years and older	<b>Specific scales:</b> Beck Depression Inventory <b>Generic scales:</b> Physical Component Score (PCS) and Mental Component Score (MCS) of the Short-Form 36	a pre-established analysis plan on an intention-to-treat basis, using two-tailed test( $X^2$ and t tests, ANCOVA)

<p>Loka <i>et al</i> (2017) California</p>	<p>The effect of physical activity on depressive symptoms and quality of life among elderly nursing home residents: Randomized controlled trial</p>	<p>Exploitative study with a quantitative approach</p>	<p>80 elderly people, including 40 in the experimental group and 40 in the control group aged over 65 years</p>	<p><b>1. Specific scales:</b> Beck Depression Inventory  <b>Generic scales:</b> Short Form 36 Quality of Life Questionnaire</p>	<p>the Social Sciences 18.0 program windows The Mann Whitney U test and the Wilcoxon signed rank test</p>
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Lee <i>et al</i> (2015) Korea	Family support of the elderly nursing home elderly patients with activities of daily living and depression	Exploitative study with a quantitative approach	204 people target aged: at least 60 years old	<b>Specific scales:</b> a shorthand tool develop by the Korean Geriatric Depression Scale	the Social Sciences 14.0 program windows
Markle-Reid <i>et al</i> (2014) Canada	An inter-professional nurse-led mental health promotion intervention for older home care clients with depressive symptoms	Mixed approach	142 eligible consenting consenting participants  Aged:70 years or older	<b>Specific scales:</b> Centre for Epidemiological Studies in Depression(CES-D) score	1.the Social Sciences version 19.0 for Windows  2.two-sided tests at the 0.05 level 3.Descriptive analyses  4.paired t-tests and Chi-square test (or Fisher's exact test)
Proctor <i>et al</i> (2014) America	Behavioral management in nursing and residential	Exploitative study with a	120 elderly people living in residential	<b>Generic scales:</b> Crichton Royal behavioural rating scale	automatic geriatric examination for

homes: a randomized controlled trial. quantitative approach or nursing homes over 82 years old computer assisted taxonomy

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Vandermeulen <i>et al</i> (2013) Julius	One-Year Effect of a Nurse-Led Psycho social Intervention on Depressive Symptoms in Patients With Head and Neck Cancer: A Randomized Controlled Trial.	Mixed approach	205 randomly assigned to either intervention (n=103) or usual care (n=102) over 65 years old	<b>Specific scales:</b> Center for Epidemiological Studies-Depression Scale	an intention-to-treat basis, Power analysis, two sided-tests, software version 2.10.0. and the Social Sciences version 20 Chicago, IL).
Wilson <i>et al</i> (2010) Canada	A Hope Intervention Compared to Friendly Visitors as a Technique to Reduce Depression among Older Nursing Home Residents)	Mixed approach	436 continuing care beds in nursing home Aged 65 or older	<b>Specific scales:</b> Geriatric Depression Scale Long Form and Geriatric Depression Scale Short Form  <b>Generic scales:</b> Hearth Hope Index	exploratory analyses

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## APPENDIX 2

**Table 3. Overview of selected articles' aims and main results.**

Authors	Aim	Results (support & effects of support )
<i>Aakhus et al</i>	To improve adherence to six guideline recommendations for elderly patients with depression targeting healthcare professionals, patients and administrators	<p>1. a website education that provided for education about depression.</p> <p><b>Effect:</b> the elderly and their families had improved their sense of depression, reduced the mood of panic, known the vital of taking medicine on time, compliance increased significantly after treatment.</p> <p>2. provided t the structured physical activities program. <b>Effect:</b> patients is more outgoing through physical activities. Improved sleep problems.</p> <p>3. oral antidepressants, and the response of older patients to antidepressant medications was observed. <b>Effect:</b> conducted the decrease of the compliance, the elderly depressed</p>

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patients with medicine counseling had a  
increase of compliance.

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Bruce *et al*

To determine whether a depression care management intervention in Medicare home health recipients decreases risk of hospitalization

1. medication management (instruct oral medicine, monitor weekly for two weeks)

**Effect:** Adherence to antidepressant medication may increase the likelihood that older patients will be effective. Treatment for depression usually involves changing the dose of the drug or changing a different name. Sometimes fatigue or loss of appetite are normal.

2. Education about management of depression care, beneficiaries and family education, and goal setting.

**Effect:** The elderly ultimately reduce the risk of hospitalization. After receiving education, the elderly patients activate the patient's initiative to treat the disease.

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<i>Clignet et al</i>	To explore the depression patients perceptions in the implementation of an intervention in mental health nursing care. Barriers and facilitators are described on the level of nursing staff and patients, and in the context of care provision	Psychological treatments and occupational therapy weekly meeting about emotional situation. Last about 45 - 60 min per session <b>Effect:</b> The depression symptoms and the quality of therapeutic relationship aspects that positive affected, elderly patients had a positive attitude to face life.
<i>Lamers et al</i>	To evaluate the effectiveness of a nurse-led minimal psychological intervention in chronically ill elderly persons with depression	Record emotion condition per day (2-10 visits in 3 months,each lat one hour) <b>Effect:</b> Elderly patients showed a $\geq 50\%$ reduction in depressive symptoms relative to baseline values.
<i>Loka et al</i>	To determine how a “Physical Activity Program”for elderly people in nursing homes affected their depressive symptoms and quality of life	10 minutes’ warm up activities,20 minutes’ rhythmic exercises, 10 minutes’ cool down exercises, last 10 week, the group participants take part in the program four days per week <b>Effect:</b> Patients had a multiple positive effect

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body such as vitality,pain physical role and  
physical health.

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<i>Lee et al</i>	To identify depression and family support, activities of daily living of elderly patients admitted to the degree of aged care facilities.	Used customized training program to educate based on the family support and activities. <b>Effect:</b> Elderly felt encouragement and needed this intervention.
<i>Markle-Reid et al</i>	To explore its effects on reducing depressive symptoms in older home care clients ( $\geq 70$ years) using personal support services	<p>1. Medication therapy and antidepressant management, monitor side effects. <b>Effect:</b> condition under control, level, patients improved knowledge of the assessment and management of depression</p> <p>2. Printed educational material for patients and their families <b>Effect:</b> The compliance and family relationship improved significantly, Reduced the cost of hospitalization</p>
<i>Proctor et al</i>	To explore that in elderly people living in residential and nursing homes, a behavioural intervention by an outreach team can improve depression, behavioural problems, and physical function	Education intervention. Provide a education problems in depression <b>Effect:</b> The compliance of elderly patients improved significantly, family members were more concerned about patients. Reduced the

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cost of hospitalization, patients' self-management consciousness has been improved.

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Vandermeulen <i>et al</i>	To investigate the effectiveness of a comprehensive nurse-led intervention focused on decreasing depressive symptoms of patients with head and neck cancer after their cancer treatment.	Nurse-led psycho-social emotional therapy consisted of six bimonthly 45-minute counseling sessions (emotional distress and mood) <b>Effect:</b> Levels of depressive symptoms were significantly lower in the intervention group, becoming optimistic, minority thought boring about the intervention
Wilson <i>et al</i>	To gain research evidence relevant to alleviating or reducing depression among nursing home residents through nonpharmacological methods.	provided with weekday hope interventions mainly involving positive messages and pictures, a modified control group, provided with a friendly weekday greeting <b>Effect:</b> No positive effect. Boring intervention

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