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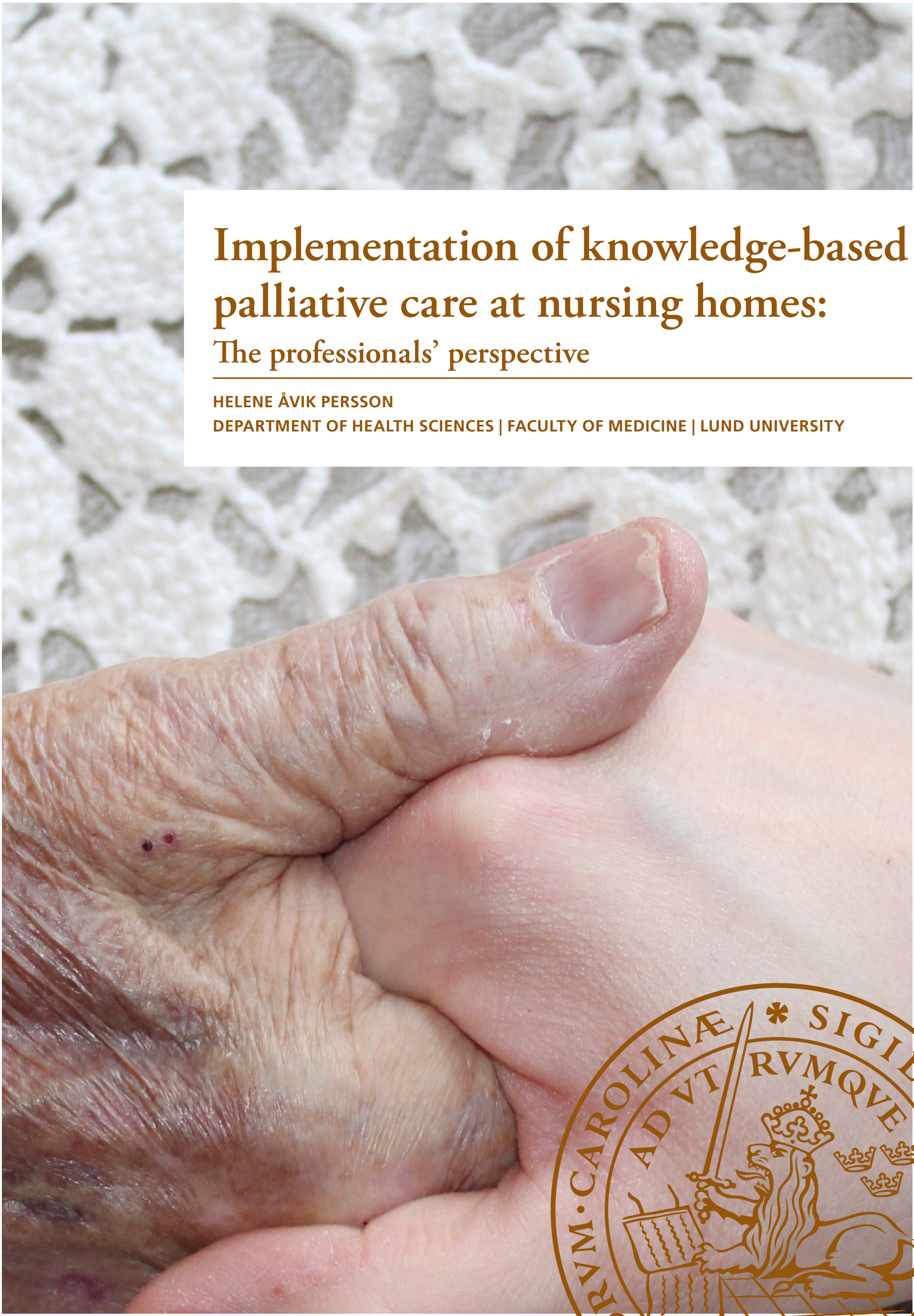

Implementation of knowledge-based palliative care at nursing homes:

The professionals' perspective

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The professionals' perspective

Helene Åvik Persson

DOCTORAL DISSERTATION

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Implementation of knowledge-based palliative care at nursing homes: the professionals' perspective

Abstract

Dying in older persons precedes often by a prolonged period of frailty and multimorbidity. The global increase in the aged population means more death at an older age and highlights the need to integrate palliative care in elderly care. Knowledge-based palliative care is lacking outside the specialist units, for which reason there is insufficient access to palliative care for older persons. Thus there is a need to implement knowledge and training in palliative care for the professionals in nursing homes. Putting evidence to proper use in practice is experienced as challenging, which calls for an exploration of experiences connected to the implementation of change in order to enhance the readiness for change in the future.

The thesis is a part of a larger project, Knowledge-Based Palliative Care for Frail Older Persons in Nursing Homes (Swedish acronym KUPA). The overall aim of the thesis was to explore the professionals' experiences of signs preceding dying in older persons and of the implementation of knowledge-based palliative care through an educational intervention at nursing homes. The thesis includes three qualitative focus group studies (I-III) and one quantitative study (IV) with pre-post design.

In Study I, experiences of early and late signs preceding dying in older persons in nursing homes were explored. The multidisciplinary team found it difficult to identify early signs since it was not part of their ordinary practice, nor indeed something they had an awareness of. Late signs were found obvious and easy to identify, and dying was something that just happened not seen as a process.

In Study II, professionals' expectations and preparedness to implement knowledge-based palliative care in nursing homes were explored. They hoped to gain increased knowledge and improved consensus in the team but questioned the organization' preparedness to change.

Study III investigated experiences of readiness for change after the educational intervention in knowledge-based palliative care at nursing homes. The professionals were hopeful about the implementation of palliative care in the nursing homes and about continuation of the education, despite barriers in the organization. The education increased their knowledge and awareness.

In Study IV, the professionals' experiences of palliative care delivery before and after the educational intervention in nursing homes was evaluated. Some improvements in the experiences of symptom management, of conversation and support and of encounter were found between and within the intervention and control groups.

There is a need to introduce palliative care early in the older person's disease trajectory to increase quality of life. This calls for more knowledge and awareness among the professionals about early-stage palliative care. Furthermore the older person and the next of kin must be informed that palliative care is a part of the care in nursing homes. Increasing the professional's readiness is a facilitation for all leaders in the health care section when a change is going to be implemented.

Key words

Dying, educational intervention, knowledge-based care, implementation, nursing home, older persons, organizational readiness for change, palliative care, professionals perspective

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MADE IN SWEDEN

To my beloved parents

Anita (1942-2010)

Björn (1938-2021)

Contents

Paper I-IV

Abstract

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Abbreviations and definitions

KUPA	Knowledge-based Palliative Care in Nursing Homes [In Swedish: KUnskapsbaserad PAlliativ vård], abbreviated as the KUPA project.
Nursing home	A nursing home is a facility with a domestic-styled environment that provides 24-hour functional support and care for persons who require assistance with ADLs and who often have complex health needs and increased vulnerability (Sandford et al., 2015).
Older persons	Cover persons aged 65 and older
ORC	Organizational Readiness for Change
Professionals	The term includes in this thesis registered nurse, registered occupational therapist, registered physiotherapist, social worker, unit manager, assistant nurses and care assistants.
WHO	World Health Organization

Original papers

The following studies are included in this thesis and are referred to by their Roman numerals in the text:

I Åvik Persson, H., Sandgren, A., Fürst, C.J., Ahlström, G., & Behm, L. (2018). Early and late signs that precede dying among older persons in nursing homes: The multidisciplinary team's perspective. *BMC Geriatrics*, 18(1), 134.
doi.org/10.1186/s12877-018-0825-0.

II Åvik Persson, H., Ahlström, G., & Ekwall, A. (2021). Professionals' Expectations and Preparedness to implement knowledge-based palliative care at nursing homes before an educational intervention: A focus group interview study. *International Journal of Environmental Research and Public Health*, *18*(17), 8977.
doi.org/10.3390/ijerph18178977.

III Åvik Persson, H., Ahlström, G., & Ekwall, A. (2022). Professionals' readiness for change to knowledge-based palliative care at nursing homes: A qualitative follow-up study after an educational intervention. Submitted.

IV Åvik Persson, H., Ahlström, G., Årestedt, K., Behm, L., Drevenhorn, E., & Sandgren, A. (2022). Palliative care delivery at nursing homes before and after an educational intervention from professionals' perspective: A pre-post design. *Scandinavian Journal of Caring Sciences*, *00*: 1-14.
doi.org/10.1111/scs.13084.

Preface

> *"How people die remains in the memory of those who live on."*
>
> Dame Cicely Saunders, founder of the Modern Hospice Movement

Those who live on will never forget the shortcomings which appeared in the palliative care, no matter what role you have. This is the main reason for my deep interest and involvement in palliative care, especially the palliative care of older persons in nursing homes. My involvement has been through different roles such as that of care assistant, assistant nurse, registered nurse and public health nurse. Also, not least, I have been involved as a daughter and next of kin.

Death is a natural element in different care contexts, including nursing homes. To be able to contribute to and participate in a person's dying with dignity, is in my opinion one of the most important tasks for professionals, but also a challenge, especially in nursing homes, where the staff often lack education and training in palliative care. Interest and curiosity have always been my guiding star in everything that I have been involved in. But it was not until I wrote my Master's thesis in public health, where I explored the public health nurse's experiences of the patient's integrity and autonomy within palliative home care, that I gained the possibility of becoming a doctoral student. In August 2015, my journey began after acceptance of my application for a doctoral position. After several years of challenges, hard work and personal development I finally reached my destination, which you now can see in front of you.

Introduction

The world's population is getting older. Frailty and multimorbidity make it difficult to identify when a palliative care approach should be initiated. Older persons do not all have the same access to palliative care. Improvement in addressing palliative care need is called for to alleviate suffering and increase quality of life (Haun et al., 2017; van der Steen et al., 2014; Sleeman et al., 2019; Zimmermann et al., 2014). Nursing homes are a major arena for death and dying, and there is an urgent need to apply palliative care, which demands special competence in the professionals. There is a knowledge gap within the competence of professionals in nursing homes concerning palliative care (Cronfalk et al., 2015; Eriksson et al., 2015; World Health Organization [WHO], 2016; Levine et al., 2017; Linder et al., 2018; Reeves et al., 2013; WHO, 2020). The professionals are important actors in an implementation process because they are the ones that are affected and influenced by the change and are the enablers of a successful change (Harvey & Kitson, 2015). In health and community care it is of great importance to be able to meet the individual's needs in the best possible way. For this to occur, knowledge-based care is required. However, the access to the best available evidence can be limited within different areas. One of these areas is palliative care for older persons (WHO, 2020).

In Sweden two documents, the National Knowledge Support Document for Good Palliative Care at the End of Life (2013) and the National Care Program for Palliative Care (2021), based on the WHO definition of palliative care (2002), describe how such care should be delivered in the end-of-life stage. Palliative care needs to be implemented in nursing homes and should constitute a competence to be integrated with geriatric care. However, in clinical practice the implementation of the best knowledge-based care is still a challenge (Wensing et al., 2020). When it comes to meeting this challenge, an exploration of experiences in connection with an implementation of knowledge-based palliative care in nursing homes becomes important.

This thesis describes the professionals' experiences of knowledge about signs that precede dying and of the implementation of knowledge-based palliative care in nursing homes. In order to deepen the understanding of the results in connection with implementation, the Organizational Readiness for Change (ORC) theory devised by Weiner (2009) is used.

Background

Older persons and dying

The population is ageing globally (WHO, 2017). Internationally, an increase is expected among persons 65 or older from 9.3 per cent in year 2020 to 16 per cent in year 2050 (Sleeman et al., 2019; United Nations, 2020). Frailty is a slowly processing condition, commonly among older persons described as increased vulnerability caused by decline in multiple physiological systems due to age, with an increased risk of delirium, disabilities, falls, hospitalization and death (Clegg et al., 2013). A large proportion of frail older persons suffer in combination with ageing from various disabilities and diseases (multimorbidity) that often lead to a need for health and social care (Knaul et al., 2018; Murray et al., 2005; WHO, 2015). Ageing is biologically characterized by a gradual lifelong decrease in the capacity of all cells and molecules. A decrease in physiological reserves can lead to increased frailty, with a vulnerability to environmental challenges and increased risk of disease and death (Vasto et al., 2010). Cognitive, sensory and psychosocial changes, and also changes in motility, often occur in combination with ageing (WHO, 2015).

Disease trajectory in older persons is often prolonged and unpredictable, which can make it problematic to identify when the older person is dying (Murray et al., 2005). The multimorbidity can increase the risk of impact on physical and psychological functioning, quality of life and life-expectancy (Marengoni et al., 2011). Quality of life is a multidimensional concept and includes both objective and subjective dimensions such as behavioral competence, environmental quality, perceived quality of life and psychological wellbeing (Lawton, 1991). One definition of quality of life offered by Lawton (1991, p.6) concerns "multidimensional evaluation by both intrapersonal and social-normative criteria, of the person-environment system of an individual in time past, current, and anticipated". The multidimensional aspect of the concept of quality of life has been highlighted by research showing the importance of both objective, subjective and contextual indicators (Santacreu et al., 2016).

The dying stage in older persons can be diffuse and can involve deterioration over a long period, which represents a challenge when it comes to identification and prognostication (Sandvik et al., 2016). The trajectory of frail older persons differs from that of younger persons with cancer (Harris, 2007), and according to a register study from 2011 and 2012 the most common causes of death among these older persons are dementia and cardiovascular diseases (Smedbäck et al., 2017). During the last week in life there commonly appear such symptoms as anxiety, confusion, dyspnea, pain and death-rattle (Andersson et al., 2018).

Voumard et al (2018) suggest the use of the concept geriatric palliative care, which is built upon three elements: geriatric medicine; palliative care; and ethics of care. Geriatric palliative care involves an interdisciplinary approach. Geriatric medicine focuses on prevention, assessment and management alongside the complexity in the disease trajectory, while palliative care focuses on special needs in connection with dying. What binds these two elements together is the holistic approach and the concern with physical, psychological, social and spiritual dimensions. The ethics of care concerns vulnerability and autonomy and the strengthening of the patient's capability.

In Sweden, as in almost all developed countries, the age group older persons (>65) is expanding: in 2020 it constituted about 20 per cent of the population and is expected to go even higher due to increasing life-expectancy (Statistics Sweden, 2021). This implies an increasing need for professionals to be possess competence in the application of geriatric palliative care.

Knowledge-based palliative care

Palliative care is built on the hospice philosophy founded by Cicely Saunders, who has described how the care of the dying should proceed both inside and outside the hospice context (Clark, 1999; 2007). Saunders coined the term "total pain" which means that we need to see the whole person to be able to ease the pain, both physical, psychical, social or existential (Clark, 1999). The WHO published in 1990 a definition of palliative care which was revised in 2002:

> "Palliative care is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual" (WHO, 2002, p. 83).

The definition offered by the WHO (2002) limits palliative care to problems that relate to life-threatening illnesses, rather than focus on burden that is present among persons with frequently multiple chronic conditions. In 2018 the International Association of Hospice and Palliative Care [IAHPC] offered a new consensus-based definition:

> "Palliative care is the active holistic care of individuals across all ages with serious health-related suffering due to severe illness, and especially of those near the end of life. It aims to improve the quality of life of patients, their families and their caregivers" (IAHPC, 2018).

This more widely applicable definition implies that palliative care can more often be provided by professionals with basic palliative care training, which puts demands on the elementary education within nursing care and the updating of skills (Radbrush et al., 2020).

There are constant efforts to find new ways to put knowledge and evidence into practice in order to improve health-care outcomes, patients' experiences and work experiences (Chen et al., 2017; Hopp & Rittenmeyer, 2021; Zullig et al., 2020). Evidenced-based medicine has been defined as involving "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients" (Sackett et al., 1996, p.71) and evidence-based practice occurs when individual clinical expertise is integrated with the best available external clinical evidence from systematic research (Sackett et al., 1996). Evidence-based care can also be seen as knowledge-based care. The best possible available knowledge in the meeting with patients is knowledge that is based on science and proven experience (based on research and systematically developed knowledge). When this knowledge is then combined with the patient's situation, wishes and experiences and the professionals' assessment and clinical expertise, evidenced-based knowledge is applied (Medeiros, 2002). Knowledge-based care implies the use of systematically collected, reviewed, evaluated and compiled scientific knowledge. Also, important aspects are clinical experience, knowledge of communication, knowledge of how to encounter the patient and knowledge of the patient's experiences gained through dialogue. In sum, knowledge-based care is care based on science and proven experience that is designed to meet individual needs in the best possible way (National Board of Health and Welfare, 2007; Swedish Government Official Reports [SOU], 2020). In addition, besides the fact that the knowledge-based care can benefit the individual, the knowledge can be used as a support for decision-makers' planning. Knowledge-based care implies that the knowledge is translated into practice, at the same time as the patient must be involved in the work of knowledge formation and dissemination (National Board of Health and Welfare, 2016a; SOU, 2020). In order to achieve health and social care on equal terms nationally, guidelines have been drawn up by the National Board of Health and Welfare. These guidelines are intended to ensure that the right care is used and for the right patient group. Another purpose is that health-care resources are being used efficiently, distributed according to the needs of the population and governed by prioritization decisions (National Board of Health and Welfare, 2019b).

The Lancet Commission Report on Palliative Care and Pain relief revealed that almost half of the people that die each year experience serious health-related suffering and could benefit from palliative care (Knaul et al., 2018). It may be more difficult to identify when older persons outside specialist care switch from curative to palliative care (Hall et al., 2011b; WHO, 2020) and an early introduction of palliative care in the illness can improve both symptom control and quality of life (Haun et al., 2017, van der Steen et al., 2014; Zimmerman et al., 2014). Furthermore, the importance of early palliative care approach has been underlined in research (Smith & Brown, 2017), with the focus on communication, teamwork, symptom relief and support for next of kin, which can improve the quality of the palliative care and facilitate dying on the individual's terms. Palliative care can be divided into an early and a late phase. The early phase is usually the longest and starts in connection with the diagnosis of a progressive incurable disease or injury. A life-prolonging treatment is often applied in this phase. The border between the early and the late phase is unpredictable. The late phase is often short, and the goal of the care is to ease suffering and promote quality of life for both the older person and the next of kin (National Board of Health and Welfare, 2013).

In Sweden, the concept of four cornerstones based on the WHO definition of palliative care (2002) comprises symptom relief, communication, team collaboration and support for next of kin (Regional Co-operative Cancer Center, 2021). A prerequisite for palliative care is a palliative care approach, which includes a professional assessment of the patient's and next of kin's condition, needs and wishes (Regional Co-operative Cancer Center, 2021). Palliative care includes both general and specialized care. General palliative care is given to individuals who have care needs that can be met by professionals with basic knowledge and skills in palliative care. For example, within general palliative care, end-of-life conversation should be conducted. One common area where general palliative care is applied is nursing homes. Specialized palliative care is given to individuals with complex symptoms or those whose life-situation requires the performance of a multidisciplinary team with special expertise in palliative care. Specialized palliative care includes assessment of unclear palliative care needs and prognosis (National Board of Health and Welfare, 2013; Regional Co-operative Cancer Center, 2021). In the past, palliative care has largely been practised and developed only within cancer care, which has meant that older persons have not been accorded equal quality in the end-of-life care (National Board of Health and Welfare, 2013; 2020). Hence the access to and the delivery of palliative care is unequally distributed across Sweden and differs in terms of age, diagnosis and care place (Brännström et al., 2012; Eriksson et al., 2015; Lindskog et al., 2015).

There is growing evidence in Sweden and worldwide of an increased need for palliative care. It is expected that by 2060 serious health-related suffering will have almost doubled, with older persons stand for one of the sharpest increases (Sleeman et al., 2019). In Sweden, two documents – the National Knowledge Support

Document for Good Palliative Care at the End of Life (2013) and the National Care Program for Palliative Care (2021) – constitute the foundation for good end-of-life care and provide the conditions for improved palliative care. However, there is a gap between the available knowledge and what is done in health care (Wensing et al., 2020), and this gap needs to be bridged in order to achieve the best possible palliative care for older persons in nursing homes.

Nursing homes

According to the WHO, the greatest need for palliative care will be among the elderly, making nursing homes a major arena for palliative care (Hall et al., 2011b; WHO, 2020). Froggatt and colleagues (2017) provide in a study an overview of the palliative care provision in European nursing homes, which generally is low and not enough supported at national and regional levels which result in a variation in the development of palliative care. Swedish elderly care has in recent decades changed significantly in extent, focus and organization. In 1992, the Elderly Reform was introduced and as a result the main responsibility for health care and social services in the case of older persons living at home or in a nursing home was transferred from the county councils to the municipalities (National Board of Health and Welfare, 1996).

There are approximately 1,700 nursing homes in Sweden (Swedish municipalities and county councils [SKL], 2020). A total of 38% of all deaths in Sweden occur in a nursing home (Håkansson et al., 2015). In 2018, 31,760 persons 65 or older died in nursing homes (Statistics Sweden, 2019). According to a Swedish study by Schön et al. (2016) the length of stay for older persons in institutional care decreased by more than 10 times during the period 2006-2012, indicating that more persons are in the late phase of palliative care when the move from their own home becomes necessary. According to the Social Services Act (*SFS* 2001:453, 5 chapter, § 5) municipalities are responsible for providing nursing homes for care and services for older persons with comprehensive needs. This form of housing is a home for older person on the basis of legislation (*SFS* 2001:453) and at the same time a workplace for professionals. The apartments in the nursing homes have an area of 30–40 square meters, including a hall and hygiene space. Besides paying rent, the older person pays a nursing fee and a fee for food. A move to a nursing home becomes relevant when an older person (>65) is so frail and ill that the care need cannot be met in an ordinary home. A right to an apartment in a nursing home is assessed by social workers in the municipality and is based on an older person's need for everyday care. Nursing homes in Sweden provide a home-like atmosphere and round-the-clock care (*SFS* 2001:453). These are often involved in providing palliative care at the end of life (Regional Co-operative Cancer Center, 2021). The nursing home is one of the settings where older persons are going to experience their dying and death. Two previous reviews (Carpenter et al., 2020; Hall et al., 2011a) revealed minor evidence concerning which intervention strategies have improved the palliative care for older persons in nursing homes. Clearly there is a further need to investigate how the delivery of such care is experienced by the professionals.

Professionals in nursing homes

There are professionals of several occupations working in nursing homes in Sweden: assistant nurses, care assistants, registered nurses, registered occupational therapists, registered physiotherapists and unit managers, who are social workers or registered nurses. The professionals that work in Swedish municipal health care are governed by the Health Care Act (*SFS* 2017:30) and the Social Services Act (*SFS* 2001:453).

The unit manager has the overall responsibility for the care delivered to the older persons in the nursing home, including responsibility for the professionals and the work environment. No formal education is needed to be a unit manager but most commonly he or she has qualification in nursing or social work (National Board of Health and Welfare, 2011; Backman et al., 2017). The registered nurse has a university education at Bachelors's level and in some cases also a specialist education in elderly care at Master's level (National Board of Health and Welfare, 2015; 2019b). The care assistant, on the other hand, usually has no training, or only a short education of less than a year, in elderly care (National Board of Health and Welfare, 2015; 2019a). The registered occupational therapists and registered physiotherapists have at least a Bachelor's degree and work with issues concerning rehabilitation and the prescription of assistive devices. Physicians working in primary health care act as consultants for the nursing homes.

The most common profession in nursing homes in Sweden is that of assistant nurse with 129,000 employees in 2020, whereof 90% women (Statistics Sweden, 2022). The registered nurse has the responsibility for the provision of care and for instructing assistant nurses and care assistants, involving delegating nursing and medical tasks to them. Together with the care assistants, the assistant nurses are the ones who work closest to the older person in nursing homes. They provide personal care and social services, including the most regular tasks such as assistance with hygiene and nutrition and the making of beds (National Board of Health and Welfare, 2015; Törnquist, 2004). The tasks most commonly delegated to them by the registered nurse are simple wound care and the checking of glucose, temperature, pulse, respiration and weight (Eurodiaconia, 2016). Assistant nurses receive up to three years of vocational education at *gymnasium* level with the focus on elderly care.

According to an evaluation of the national guidelines (2016b) it is mostly the registered nurses that are being offered updating of skills. A systematic review concerning the nurse's role in palliative care shows that more support and knowledge is being made available in order to fulfil the ambition of giving the best possible palliative care. It has not been uncommon for nurses to feel insufficiently trained, to feel a lack of support and to experience problems in the communication with other professionals (Sekse et al., 2018).

Both nationally and internationally there are challenges concerning the knowledge and practice of palliative care among the professionals in the nursing home context, due to the difficulty of determining when the focus should shift from general care to palliative care and of identifying when the final stages of life begin (Brennan, 2017; Froggatt et al., 2017). It is essential that the professionals should have sufficient knowledge of palliative care to be able to identify the older person's different care needs for the purpose of giving the requisite support and symptom relief (Regional Co-operative Cancer Center, 2021). Previous research has underlined the insufficient support and lack of knowledge among professionals concerning palliative care in nursing homes (Dwyer at al., 2011; Eriksson, et al., 2015; Hall et al., 2011a; Levine et al., 2017; Muldrew Neé Preshaw et al., 2019; Reeves et al., 2013; Smedbäck et al., 2017). A study by Bui et al. (2020) which explored nursing home professionals' attitude to death and dying showed that more knowledge and skills were wanted, at the same time as there was a feeling among the professionals that they were already providing comfortable end-of-life care. The professionals had inadequate understanding of palliative care and of fundamental concepts such as relief from suffering and quality of life.

Professionals play an important role in nursing homes, because they are the ones whose task it is to deliver the palliative care. The implementation of such care requires an early approach and requires that the professionals have both geriatric and palliative care competence (Smith & Brown, 2017; WHO, 2020). However, several barriers to implementation have been identified, such as insufficient knowledge concerning how to identify the palliative care need and insufficient communication about death with the older persons and their next of kin (Aldridge et al., 2016; Anstey et al., 2016). Moreover, previous implementation research shows a large gap between the research findings about the best care and the application of these findings in clinical care (Grol et al., 2013; Mathieson et al., 2019; Zullig et al., 2020).

Implementation science

Due to a rapid increase in clinical research there is a need for knowledge about effective methods to implement the research findings (Greenhalgh et al., 2004; Nilsen & Birken, 2020). The main issue in the implementation field is to bridge the gap between research and evidence-based practice in order to provide more effective and secure care (Grol et al., 2013; Nilsen & Birken, 2020)

The definition of implementation science is "scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routines practice, and, hence, to improve the quality and effectiveness of health services and care" (Eccles & Mittman, 2006, p. 1). Thus, implementation can be described as "making use of knowledge" and defines as "active and planned efforts to mainstream an innovation within an organization" (Greenhalgh et al., 2004, p. 582). The twofold aim of implementation science is to test strategies for putting evidence-based clinical innovations into wider practice and to produce knowledge that can be applied in order to improve practice (Fixen et al., 2019; Nilsen, 2015; Rogers, 2003). Innovation can be described as an idea, object or project new to an individual. It is not only a question of the presence of new knowledge, however, there has also to be an attitude and a decision to embrace and adopt it (Rogers, 2003). To enhance the uptake of the innovation, implementation make an effort to modify the behavior within a context. Further important concepts within implementation science is diffusion and dissemination. Diffusion is an unplanned and informal spread of the innovation while dissemination is an active, formal and planned spread (Berwick, 2003; Greenhalgh et al., 2004; Rogers, 2003).

Bauer and Kirchner (2020) sort out the difference between clinical research and implementation research. The clinical innovation that is going to be implemented is engaged with the context rather than controlling it as in efficacy studies. Another central aspect is the close collaboration with leaders and professionals in implementation research (Bauer & Kirchner, 2020).

The range of implementation approaches is large and there are more than 100 different ones within the implementation science field (Birken et al., 2017; Nilsen & Birken, 2020). Nilsen (2015) tried to sort out the different theoretical approaches in implementation science and identified five categories of theories, models and frameworks: process models; determinant frameworks; classical theories; implementation theories; and evaluation frameworks. The common denominator in these categories is that they all handle factors that either are believed to have or are confirmed as having an impact on implementation processes and outcomes (Nilsen, 2015). An implementation theory provides understanding and/or explanation of aspects of implementation (Nilsen & Birken, 2020). In implementation science both frameworks and theories often have a descriptive purpose which involves identifying and describing what influences implementation outcomes (Nilsen & Birken, 2020). To identify and understand factors that determine why an evidence-based intervention may or may not be successful, can improve the quality of the uptake (Moullin et al., 2020). It can for example be factors that impact professionals' adoption of a knowledge-based educational intervention. The foundation of this thesis is the implementation theory Organizational Readiness for Change (ORC) (Weiner, 2009).

Theoretical approach

To identify and properly understand the factors that facilitate or hinder the likelihood of implementation effectiveness and success, the theory Organizational Readiness for Change is applied as theoretical approach in this thesis.

Organizational readiness for change

To make a change and implement new programmes, practices or policies in health care, an organizational readiness for change is needed. In the words of Weiner (2009, p.68), "organizational readiness for change refers to organizational members' change commitment and self-efficacy to implement organizational change". It is a question of psychological and behavioural preparedness. This theory takes account of several factors that can promote the readiness for change within an organization (Figure 1).

Possible Contextual Factors involve conditions that can affect the organizational readiness for change either in a positive or in a negative way (Figure 1). These conditions involve organizational culture, where cultural values either fit in with or conflict with the change valence. Policies and processes can affect organizational members' assessment of task demands, resource perceptions and situational factors. Also, past experience regarding change can affect the change valence (Weiner, 2009).

Change Commitment is based on the members' collective decision to perform the actions that are required for the implementation in the organization. Change commitment is a function of *Change Valence* (Figure 1). Do the members think that the change is beneficial, important and needed and do they value it? If the members assign the change a high value, they want to implement it. Their reasons for assigning it a high value do not necessarily need to be the same, and the main question regarding organizational readiness for change is whether the members collectively value the change enough to commit to its implementation (Weiner, 2009).

Change Efficacy is based on the members' collective belief in the ability to organize and carry out the planned actions that are involved in the change. Change efficacy is a function of *informational assessment* including three determinants related to the capability of the implementation: *task demands*; *resource perceptions*; and *situational factors* (Figure 1). Do the members know what it will take to implement the change, do they have the resources, and can the change be implemented effectively given the present situation? If the members share an assessment of task demands, resource availability and situational factors, they have a shared sense of confidence that a change can be implemented and the change efficacy is high (Weiner, 2009).

A high level of readiness in the organization may lead to a more successful implementation of change because of desire for *initiation*, *persistence* and *cooperative behaviour* (Figure 1). Members that want to initiate change, show great persistence against barriers and cooperate on a higher level, have achieved a *Change-Related Effort* which can result in an *Effective Implementation* (Figure 1) (Weiner, 2009).

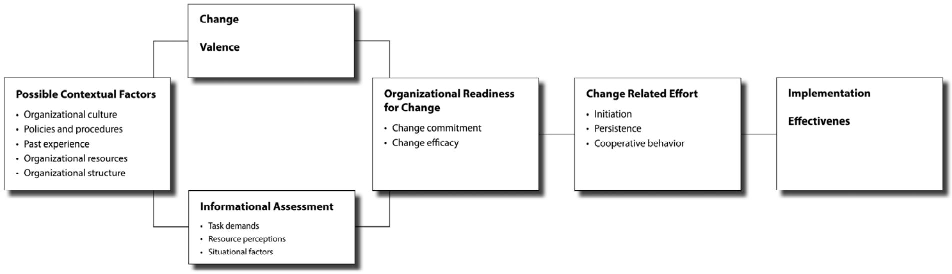

Figure 1. The Organizational Readiness for Change determinants and outcomes. Reprinted with permission from Bryan J Weiner (2009).

Rationale

The population world-wide is getting older. The WHO (2020) notes that older persons do not have the same access to palliative care, due to the fact that the professionals find it difficult to identify when the final stages of life begin. In nursing homes, the best possible care is sought for the older persons approaching the end of life (Carpenter et al., 2020; Hall et al., 2011a). However, palliative care is for the most part lacking at an early stage in nursing homes, contrary to the palliative care approach that has been developed in cancer care. In conjunction with the complex needs associated with normal ageing and multi-morbidities there can be difficulty for the professionals to identify palliative care need, for which reason older persons do not get access to such care in nursing homes. Therefore, there is an urgent need for increased knowledge and training in palliative care (WHO, 2020). From previous research, the difficulties associated with the dissemination and implementation of scientific knowledge are well known. This, together with the fact that there are only a sparingly number of studies on palliative care interventions in nursing homes, indicates that more research is needed about factors that can promote the readiness for change on the part of the professionals, in order to implement good knowledge-based palliative care in the nursing home.

Aims

The overall aim of this thesis was to explore the professionals' experiences of signs preceding dying in older persons and of the implementation of knowledge-based palliative care through an educational intervention in nursing homes.

The specific aims were:

I To explore the experiences of early and late signs preceding dying in older persons in nursing homes from the multidisciplinary team's perspective.

II To explore professionals' expectations and preparedness to implement knowledge-based palliative care in nursing homes before an educational intervention.

III To investigate professionals' experiences of readiness for change to knowledge-based palliative care at nursing homes after the educational intervention in KUPA project.

IV To evaluate professionals' experience of palliative care delivery before and after the educational intervention in palliative care in nursing homes.

Methods

Design

This thesis includes both qualitative (I, II, III) and quantitative (IV) research designs, and the perspective is that of the professionals (Table 1).

Table 1. Overview of the four studies included in the thesis.

Study	**I**	**II**	**III**	**IV**
Design	Qualitative, explorative	Qualitative, explorative	Qualitative, abductive	Quantitative pre-post design
Sample	Professionals (n=20)	Professionals (n=48)	Professionals (n=39)	Professionals (n=289)
Data collection	Focus group interviews	Focus group interviews	Focus group interviews	Questionnaires
Analysis	Qualitative content analysis according to focus group method	Qualitative content analysis with an inductive approach	Qualitative content analysis with an abductive approach including inductive and deductive analyses	Descriptive and inferential statistical method

The KUPA project

This thesis is part of the implementation project named "Knowledge-Based Palliative Care for Frail Older Persons in Nursing Homes" (KUPA) (Ahlström et al., 2018). The aim of the KUPA project was to implement and evaluate how a knowledge-based educational model for palliative care in nursing homes affects the quality of life and the participation in the care process for older persons in nursing homes and their next of kin. A second aim was to explore the professional's implementation process of palliative care and the role of leadership. The third aim was to investigate which factors that affects the implementation process of the educational model. The project was conducted as a non-blinded control intervention study in order to implement knowledge-based palliative care in two counties (referred to as A and B) in the south of Sweden. The KUPA project is registered as a Clinical Trial (NCT02708498). A total of 30 nursing homes, both large and small and in both rural and urban areas, were included. Twenty were in county A, ten in county B. The intervention was implemented in 20 nursing homes and the remaining 10 served as control nursing homes. Data collection was performed in two sequential periods in each county. Thus, the intervention was first implemented in ten nursing homes in county A whilst the ten in county B served as control group. In a second step, the intervention was implemented in county B at the same time as ten new nursing homes (those that had not got the intervention) in county A served as control group.

The goal of the KUPA project was the initiation of an ongoing improvement of palliative care in the selected nursing homes. In line with this, the seminars were to continue after the project was finished, though conducted now by the professionals themselves.

The educational intervention

An educational intervention was provided for professionals in nursing homes (assistant nurses, care assistants, registered nurses, registered occupational therapists, registered physiotherapists, social workers and unit managers) through seminars. At each nursing home 8−12 professionals were included, with the mean score of 8 participating in each seminar (Ahlström et al., 2018; Benzein & Ahlström, 2019). The seminars were led by two registered nurses and researchers experienced in the field of geriatric and palliative care. The author of the thesis served as an assistant leader in several nursing homes in the two counties. At each included nursing home there were five two-hour seminars during a period of six months. The seminars were designed to increase knowledge and awareness of palliative care and to stimulate the participants to reflect on and discuss different situations and issues that may arise at work as well as to improve the current care. They provided opportunities to learn from each other's experiences and knowledge and provided inspiration to try new ways of dealing with difficult situations. The content of the seminars was based on two knowledge-based documents: The National Knowledge Support Document for Good Palliative Care at the End of Life (National Board of Health and Welfare, 2013) and The National Care Program for Palliative Care 2012–2014 (Regional Co-operative Cancer Center, 2012). Before the seminars, the participants received an educational booklet (Benzein & Ahlström, 2019), for use during and between the seminars. The seminars contained five themes which are described in Table 2. The booklet contained assignments to be completed between one seminar and another and then discussed at the subsequent seminar. A detailed overview of the content of the educational intervention can be found in Benzein and Ahlström (2019).

Table 2. Overview of the main content of the educational intervention

Themes	Content in the themes
The palliative approach and dignified care	Palliative care, the WHO definition, the values underlying palliative care, the transition to palliative care, dignified and non-dignified care.
Next of kin	The situation of the next of kin, children as next of kin, participation, support.
Existence and dying	Existence, dying, the place where care is given, the dead body.
The alleviation of symptoms	Symptoms, the assessment of symptoms, instrument for the assessment of symptoms, general and specific symptom assessment, the alleviation of symptoms.
Collaborative care	The concept of collaboration in care, participation and self-determination, the prerequisites for collaborative care, the act of collaboration.

Sample and recruitment (studies I–IV)

The initial sample and recruitment procedure in county A and in county B were the same in all four studies (I–IV). First, the manager for health and social care in each municipality approved the participation. Second, the unit managers of the nursing homes in each municipality were contacted and informed about the KUPA project of which this thesis is a part. The professionals were first informed by the unit managers about the project. The specific recruitment procedures for the studies are described below.

In Study I, strategic sampling was applied to get a selection of participants that are representative of the total group and to get a variation in experiences (Krueger & Casey, 2015). Therefore, the selected participants were from the nursing homes of different sizes and included both rural and urban areas in both county A and county B. The first step in the recruitment process of Study I was that the unit managers at four of the 30 nursing homes were asked if their professionals could participate in Study I. These unit managers gave their written consent for carrying out the study (Study I) in their nursing homes.

Second, the unit managers asked the professionals if they wanted to participate and were thereafter asked to choose a mixture of the professions (assistant nurse, registered nurse, registered occupational therapist, registered physiotherapist, social worker). The inclusion criterion was at least two years' work experience in nursing homes. The unit managers were also requested to gain a variation in terms of age, gender and work experience. Furthermore, these managers were invited to participate in the study themselves, and two of them did so. For detailed background characteristics, see Table 3.

In Study II and Study III strategic sampling was applied. A mixture of professions working in six nursing homes where the KUPA project was ongoing and participated in the educational intervention, were selected in order to generate a wide range of experiences and opinions (Krueger & Casey, 2015). The participants worked in nursing homes located in rural and urban areas in both county A and county B. The sample and recruitment process in Study II and Study III started with the giving of information to a delegated contact person at each nursing home who then gave the information to the professionals and asked them about participation. The inclusion criterion for Study II was professionals working in nursing homes participating in the educational intervention in the KUPA project. Study II included a total of 48 professionals, 45 of them females and 3 males. There were 32 assistant nurses, 7 registered nurses, 4 occupational therapists, 2 physiotherapists and 3 social workers.

The additional inclusion criterion for Study III was professionals that had participated in the educational intervention. Study III included a total of 39 professionals (after 9 drop-outs among the professionals in Study II), 37 of them females and 2 males. There were 28 assistant nurses, 6 registered nurses, 3 occupational therapists, 1 physiotherapist and 1 social worker. Of all the participants in both Study II and Study III, one third had a Bachelor's degree. No further background data were collected.

The inclusion criteria were that the unit manager at the particular nursing home should approve the participation and a condition was that no previous worked-based education in palliative care should had been provided in the nursing homes. The participants in Study IV were all the professionals that worked at the 30 nursing homes included in the KUPA project. Study IV's sample and recruitment process started with the giving of information about the aim of the study and about participation to the managers and/or the contact persons at both the intervention and control nursing homes. In some nursing homes, the contact persons informed the professionals about the study, and in some nursing homes the researchers were invited to do so. Then, the contact person or the unit manager distributed the questionnaire to all the professionals. Finally, the sample consisted of 289 professionals. For detailed background characteristics, see Table 3.

Table 3. Background characteristics of participating professionals in studies I and IV.

Background characteristics	**Study I**	**Study IV**	
	n=20	**Intervention group n=129**	**Control group n=160**
Gender, n (%)			
Male	2 (10.0)	10 (7.8)	8 (5.0)
Female	18 (90.0)	118 (91.5)	152 (95.0)
Missing data	-	1 (0.7)	-
Age in years, mean (range)	47.0 (26-66)	45.5 (21-65)	47.0 (21-65)
Work experience			
General palliative care, n (%)	-	115 (89.1)	149 (93.1)
Specialist palliative care, n (%)	1 (5.0)	15 (11.6)	13 (8.1)
Current workplace in years, mean (range)	7.5 (1-18)	-	-
In years, mean (range)	-	12.0 (0-44)	14.0 (0-38)
Profession, n (%)			
Assistant nurse	5 (25.0)	111 (86.0)	133 (83.1)
Care assistant	-	8 (6.2)	16 (10.0)
Occupational therapist	4 (20.0)	1 (0.8)	1 (0.6)
Physiotherapist	4 (20.0)	1 (0.8)	3 (1.9)
Registered nurse	3 (15.0)	6 (4.6)	3 (1.9)
Unit manager	2 (10.0)	-	-
Other	2 (10.0)	1 (0.8)	3 (1.9)
Unknown	-	1 (0.8)	1 (0.6)
Management, n (%)	-		
Leader position		3 (2.3)	2 (1.3)

Data collection

Focus group interviews were used to collect data for studies I-III. This method can capture attitudes, values, variations and a wide range of experiences through discussion among the participants and is well-suited to the investigation of new areas and phenomena (Kitzinger, 1995; Kruger & Casey, 2015). In Study IV, questionnaires were applied to collect data. The questionnaire is a research instrument that collects information about the respondent's attitudes, experiences or opinions using a list of questions or items (Kirkwood & Sterne, 2003).

In Study I, four focus group interviews were conducted before the professionals received the educational intervention (Table 1). Time and place (which particular room in the nursing home) were decided together with the unit manager. Before the interviews started, the participants were asked to fill in a questionnaire concerning background information (Table 3). A semi-structured interview guide was used to carry out the focus group interviews. These had an average duration of 64 minutes (range 48–83).

In Study II, six focus group interviews were performed directly before the educational intervention; in Study III, six such interviews were performed directly after it. In both Study II and Study III, a semi-structured interview guide was applied with five broad questions and a follow-up with probing questions, developed from Weiner's ORC theory (2009). The focus groups interviews had an average duration of 38 minutes (range 24-45) in Study II and 43 minutes (range 34-53) in Study III. They were conducted at the nursing homes where the professionals worked.

In studies I, II and III the moderator was a researcher with previous experience of focus group interviews and the assistant moderator were also a researcher and had the task of taking notes and handling the recording equipment. The moderator's task is to ensure that all the participants speak, to observe the group dynamics and to ensure that the conversation is anchored in the purpose and theme of the interview (Krueger & Casey, 2015). The author of the thesis was either moderator or assistant moderator in most of the focus group interviews in studies I, II and III. All focus-group interviews were digitally recorded and transcribed (studies I, II and III). The transcription in Study I was done by the author of this thesis and the transcription in Study II and Study III was done by an external transcriber.

In Study IV, a questionnaire named "Your experience of palliative care" was used in all nursing homes for all professionals. In the planning stage of the KUPA project there were in the literature no questionnaires to measure professionals' experience of palliative care delivery in nursing homes. The questionnaire used in Study IV was constructed to cover a broad perspective on palliative care by Linnaeus University's Center for Collaborative Palliative Care in Sweden, including 46 items (seven of them sociodemographic ones). The items in the originally questionnaire represent five domains: symptom relief and care; organization and co-ordination; conversation and support; participation; and reception.

In Study IV, the domains were denominated as: symptom management; conversation and support; and encounter. Each question has a response format with 3–5 categories. The data collection was conducted at the same time in the intervention and control units, meaning answering of the questionnaire one month before and within one month after the six-month intervention. The questionnaires were distributed to the professionals by the contact person at the appropriate time. The participants were asked to put the completed questionnaire in a locked mailbox. They were given up to three reminders. The questionnaire has been evaluated for content validity through cognitive interviews with healthcare professionals in different care contexts.

Data analysis

Qualitative content analysis

Content analysis is a research method for drawing replicable and valid inferences from data for the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action (Krippendorff, 2018). The methodology is not rooted in only one scientific tradition, which demands that the researcher needs to choose the approach for the particular study (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005; Kitzinger, 1995; Krueger & Casey, 2015; Vaismoradi & Turunen, 2013). The procedure in a qualitative content analysis was to break down data into meaning units, coding these units and then grouping them in accordance with the codes to which they refer. In this thesis, three different approaches were used in the data analysis of studies I-III. In Study I, the analysis was based on content analysis according to the focus group method developed by Krueger and Casey (2015), which is a method that focuses on the interaction between the participants and where the discussion among the participants generates the data. The content analysis in Study II followed a stepwise process as described by Elo and Kyngäs (2008) with an inductive approach, which it is suitable to use if there is no former knowledge about the phenomena to be investigated. An inductive approach goes from the specific to the general, particular instances are identified and combined to form a whole (Elo & Kyngäs, 2008).

The inductive content analysis in Study I and Study II began with reading the transcribed text several times to achieve an overall picture of the content of the interviews. Next, identification of meaning units was done in relation to the aim of the studies, in order to catch units for analysis. A meaning unit can be described as a part of a communication between participants and contains one or more expressions, headings, paragraphs and/or sentences (Krueger & Casey, 2015). In order to shorten the text but retain the content, the meaning units were condensed and labelled with a code. Coding is an important function in qualitative data analysis because it describes all the core aspects of the content of the data, with notes and headings (Elo & Kyngäs, 2008; Kitzinger, 1995; Richards, 2020). Codes which belonged together were then gathered under higher-order headings and those which had similar content were brought together in sub-categories, main categories and a later a theme.

The analysis in Study I was conducted by the author of the thesis, and parallel, the last author of the study conducted an independent analysis as well. In Study II, the author of the thesis made the analysis. Through the analysis process in both Study I and Study II the co-authors took part by reading the transcribed interviews. Regular meetings were held where the other authors reviewed the categories and the themes, offered preliminary interpretations and reflected upon the content of the analysis. This analysis process with all authors lasted until consensus was reached. In Study II and Study III, NVIVO software, 12th version, was used for all steps of the analysis (Edhlund, 2019).

Study III included a content analysis based on Hsieh and Shannon's (2005) abductive approach, which involves a combination of both inductive and deductive analyses. The purpose of abduction is to recognise a context of meaning, and central to the approach is the interpretation of underlying patterns (Erikson & Lindström, 1997; Karlsen, 2021). In an abductive approach, theory and empirics alternate (Erikson & Lindström, 1997). The deductive analysis can be described as concept-driven, while the inductive analysis can be described as a data-driven (Hsieh & Shannon, 2005).

Deductive analysis

The implications of existing theories or explanatory models are in a deductive analysis tested against the collected data and theory (Hsieh & Shannon, 2005). In Study III the pre-existing concepts from the focus group study before the educational intervention in the KUPA project were used (Study II, Åvik Persson et al., 2021). First, the transcribed interviews were read through to get a sense of the data and the whole. Next an attempt was made to identify the pre-existing concepts in the collected data in the analysis but only one concept was completely the same as the previous study (Study II, Åvik Persson et al., 2021). All the other concepts differed in some way from the pre-existing ones and were therefore subjected to inductive analysis.

Inductive analysis

The interview text that did not fit into the predefined concepts from Study II, in the deductive analysis was read several times in order to catch a sense of the whole. Patterns of similarities and differences were identified inductively based on the subjective interpretation of the context of the text (Hsieh & Shannon, 2005). Next, meaning units that captured the aim of the study were highlighted with a keyword or a phrase, named coding. In the next step, the codes were merged with other codes that were alike and thus belonged to the same group. The next step was that the latent content of the meaning units was interpreted and compared with the pre-existing concepts from the deductive analysis. No new themes or categories appeared.

Final analysis

The abductive approach allowed an interpretation of the results from both the deductive and inductive analyses. In order to acquire a deeper understanding of the result patterns in the particular context, the analytical process was repeated between interpretation of the part and of the whole. The final analysis resulted in a modification of the already existing themes, main categories and sub-categories to express the essence of the content.

Statistical analysis

Descriptive statistics

In Study I and Study IV, descriptive statistics (frequencies, percentages and means) were used to present the participants' sociodemographic characteristics.

Inferential statistics

In Study IV, the Mann-Whitney U-test and Pearson's chi-square test were used to investigate if there was a difference between the intervention group and the control group in terms of sociodemographic variables at baseline.

To evaluate the educational intervention in Study IV, both within-group and between-group analyses were performed. First, separate within-group analyses were performed in the intervention and control groups, using the Wilcoxon signed-rank test for experience of palliative care delivery after compared with before. Then the difference scores were calculated by subtracting the follow-up scores from the baseline scores for the intervention and control groups and the difference scores between the groups were analysed using the Mann-Whitney U-test. The Benjamini-Hochberg method was applied for the Mann-Whitney U-test on difference scores, to prevent false discovery rate (FDR) due to multiple testing (Benjamini & Hochberg, 1995).

A drop-out analysis was performed by means of sub-group analysis which involved comparing the drop-outs from the intervention group with the participants in the intervention groups and comparing the drop-outs from the control group with the participants in the control group.

P-values of 0.05 or less were considered statistically significant. For the statistical analysis IBM SPSS Statistics for Windows, version 24.0 was used.

Pre-understanding

Consideration should be given to the influence of pre-understanding (presuppositions concerning reality) and how it is to be managed in research (Alvesson & Sandberg, 2022). The pre-understanding from the author of the thesis is based on several years' experience of working as a professional in home care and in nursing homes. To prevent the interpretation of the data from being influenced by the pre-understanding and creating bias, there were constant discussions and reflection with the co-authors, especially during the analysis of the qualitative studies.

Ethical considerations

The thesis was conducted in accordance with the Declaration of Helsinki (World Medical Association, 2013) and the ethical principles of respect for autonomy, non-maleficence and beneficence, and justice (Beauchamp & Childress, 2019). Ethical approval was obtained for all four studies in the thesis from the Ethical Review Board in Lund, Sweden (Study I, reference no. 2015/167; studies II, III and IV, no. 2015/4; no. 2015/69). Furthermore, the thesis was carried out in accordance with the Swedish Ethical Review of Research Involving Human Act (*SFS* 2003:460) and the General Data Protection Regulation (2016/679/EU).

The principle of respect for autonomy

The principle of respect for autonomy implies that persons have rights with regard to the expression of opinion, with regard to decision-making and with regard to making choices and acting on the basis of personal values and beliefs. The principle also involves respectful actions and attitudes which includes enabling persons to act autonomously (Beauchamp & Childress, 2019).

The participants in studies I–IV received both oral and written information about the purpose of the study and about the confidential treatment of the material. It was made clear that participation was voluntary and that they could withdraw at any time without giving any reason and without consequences. Before the participants signed the informed signed consent, they were given the opportunity to ask questions if there were any ambiguities.

The principle of non-maleficence and beneficence

The principle of non-maleficence implies not risking causing harm to others. The principle of beneficence implies acting so as to benefit others and contribute to welfare. Non-maleficence and beneficence are sometimes combined in a single principle (Beauchamp & Childress, 2019).

The results from studies I–IV are reported in such way as to maintain confidentiality. Each participant had received a unique code containing both letters and numbers. Code lists were drawn up and saved in encrypted form on an external hard drive which is locked in a fireproof safe, together with the signed consent forms. Code lists and consent forms are kept separate from audio recordings and printed interviews in the case of studies I–III. In the case of Study IV, the code lists are stored apart from the questionnaires. The data material is stored according to the guidelines set out by Lund University. In the case of studies I–III, just the participants' professions are used in the quotations, in order to maintain confidentiality. All the researchers involved in the data collection are licensed professionals in healthcare and have previous experience of working with confidentiality.

The participants in studies I–III were interviewed at the workplace, in order to facilitate the logistics and security of their participation.

The principle of justice

The principle of justice stands for appropriate and fair treatment of individuals, equality and the equitable distribution of benefits. It can be challenging to apply justice because it requires watchfulness to ensure that the intention is upheld (Beauchamp & Childress, 2019).

In order to apply the principle of justice, all participants got the same information in the case of the particular study and no person was excluded from the sampling and recruitment process because of age, gender, nationality, political affiliation or religion. The selection of participants for the focus group interviews in Study II and Study III was based on participation in the educational intervention. Even though only 8–10 of the professionals at each included nursing home participated in the educational intervention, the others still had the opportunity to be a part of the sample in the data collection for Study I and for Study IV.

Main results

The results from studies I–IV are presented in terms of three themes: *Knowledge of signs preceding dying and the palliative care process* (studies I, II); *Readiness for change before and after an educational intervention* (studies II, III); *Palliative care delivery* (Study IV). A detailed description of the results is presented in each separate paper.

Knowledge of signs preceding dying and the palliative care process

Before the educational intervention, the professionals had difficulty in identifying early signs because they experienced dying as a happening and not as a process. During the focus group discussions, early signs were described as small and subtle, categorized as going into a bubble from a multidimensional approach including both physical, psychological, social and existential aspects. The early signs described were the following: *lack of interest in the surrounding world*; *low mood*; *increased sleep*; *newly added confusion*; *reduced physical ability*; and *decreased appetite* (Study I).

Late signs that precede dying were clear and obvious for the professionals. These late signs included both physical and psychological aspects and were something that the professionals often encountered in their daily work and felt comfortable talking about. Their experience regarding late signs was wide and categorized as the body begins to shut down, which indicates that the body starts to prepare for death. The late signs described were the following: *reduced circulation*; *increasing worry and anxiety*; *stopped eating and drinking*; *loss of consciousness*; and *changed breathing pattern* (Study I).

The focus group discussions gave the professionals an increased awareness of signs that had previously not been identified as early signs preceding dying. The unawareness that was present in the beginning was transformed to obviousness in the end of the discussions, when the professionals had identified both early and late signs and become clear about how to distinguish between signs in the palliative care process (Study I).

The professionals described a new way of thinking whereby palliative care is seen as a process and starts long before the older person's last days. The process often begins at the same time as the older person moves into a nursing home. Furthermore, the professionals pointed out that the focus should be on the care during the whole dying process, from early to late stages in the palliative care, and not just on the end, which is common today. They experienced palliative care as difficult, and it was important to gain knowledge so the care could start as soon as the older person is informed about their uncurable health condition (Study II).

Readiness for change before and after an educational intervention

Palliative care was experienced as an important field deserving of priority. Before the educational intervention, the professionals felt hope about what the education could give them and their workplace. At the same time, however, they felt skepticism concerning the organization's preparedness and readiness, as plans must be drawn up to implement palliative care in the daily work after the educational intervention. Despite the doubts, though, the professionals had a positive attitude towards the education and had a solution-focused approach. To have a positive attitude and an interest of learning something new was considered essential to the success of the educational intervention (Study II).

After the educational intervention, the pedagogical method used in the educational intervention was experienced as different and better than any that was used in previous educations. It was experienced as positive by the professionals that they had reflected in group over a long period and they had not got 'jam-packed' with information. Furthermore, the professionals had a belief in future improvements in the nursing homes, which underpinned the readiness for change. However, changes could create resistance, so it was important of market the education in a positive way, to promote further dissemination (Study III). The professionals drew attention to different areas related to readiness for change, such as: increased knowledge; consensus and team spirit; barriers in the organizational context; facilitators for the implementation; and future plans of further education.

Increased knowledge

The professionals had expectations of acquiring increased knowledge in palliative care because it was an area that needed to be acknowledged and updated regularly at the workplace. It was a question of increased knowledge in areas such as encountering next of kin and safety palliative care (Study II). After the educational intervention, the professionals stated that they had acquired increased knowledge of palliative care which could help the development and establishment of a readiness for change in the nursing homes. They now had a broader foundation to stand on and an increased awareness of the practice of palliative care. The assistant nurses highlighted that they had received knowledge about what signs to look for in the older person which called for them to contact the registered nurse. Another area that the professionals described as improved after the educational intervention was the knowledge about communication with next of kin. One example of this was the professionals' enhanced awareness of the importance of discussing things with next of kin in palliative care situations and offering them support, such as bereavement support after the older person's death. The professionals stated that they felt safer after the educational intervention due to an increased knowledge of what can happen near death, and previous fears connected to palliative care had disappeared or were reduced. The greater sense of safety meant that they felt more prepared to handle and answer the questions from next of kin and colleagues regarding palliative care (Study III).

Consensus and team spirit within the team

Before the educational intervention the professionals' expectations were also focused on reaching consensus in the team – a wish to work towards the same goal was clearly presented. They hoped for increased interprofessional communication and hoped that the education would give them an increased understanding of their different roles. They called for better collaboration between the different professions in order to be able to provide the best possible care. Furthermore, they wanted opportunities to reflect together as a team at the workplace. Such discussion had an especially important role to play when there was an unusually demanding situation, for example when the older person had died and the next of kin had questions (Study II). The educational intervention was found to provide greater understanding of the importance of co-created care together with the older person and next of kin. The professionals underlined that they had learned to focus more on teamwork and had learned that this work needed to be under constant development. Furthermore, it was stated that a permissive work climate and caring for each other were important when it came to achieving team spirit and good team results. Another result of the education was that everyone respected the others' professions, and the hierarchy was something that the professionals were trying to erase. It had been stimulating to hear the reflections of others in the team, but the professionals emphasized that the education had also increased self-reflection and caused them to think more deeply about existential issues in connection with death and dying, which felt rewarding. The awareness achieved from the education had stimulated the effort to bring about improvements at the workplace (Study III).

Barriers in the implementation context

The doubts about the organization's readiness for change that were present before the educational intervention began were still present after it was over and were mentioned as barriers by the professionals (studies II, III). A lack of trust regarding the preparedness of the organization to implement palliative care was described before the educational intervention (Study II). Also, skepticism arose about implementing palliative care in everyday work due to a lack of personnel resources which could limit the ability to accomplish the change. It was experienced as difficult to get an experienced replacement when the professionals wanted to take part in education. The professionals thought that these insufficient personnel resources could negatively affect the organization's readiness for change because a sufficiency of resources were experienced as an essential part of improvement work (studies II, III).

Another barrier to implementing palliative care was financial resources and a too tight budget that controlled decision-making concerning change. There was often a lack of money for employing more professionals, which was shown in a lack of extra standbys when death was expected for an older person. The participants experienced constant cost-cutting measures which gave them a feeling of never being able to develop the work as they wished. They underlined that economics should not be allowed to limit palliative care (studies II, III).

The professionals highlighted that parallel development work was going on at the workplace both before and after the educational intervention, including various projects, which could be a barrier and limit the implementation of palliative care. It was difficult to make use of the new knowledge in such circumstances. It could be stressful that the project must be "squeezed in" between ordinary work tasks, and they underlined that there were a lot of projects going on (studies II, III).

Lack of time was another barrier, both before and after the educational intervention. Insufficient time was something that always limited the professionals, and they needed to make time to participate in the educational intervention. The carrying out of improvement work with palliative care would take a long time and the professionals described a feeling of stress when they were caring for a dying person because their colleagues at the same time needed help on the ward. There were many other tasks they had to manage such as paperwork, cleaning and cooking. However, they hoped that the manager would prioritize palliative care and take into account the time needed for implementing improvement work (Study II, III).

Facilitators for the implementation

When changes were to be made in the organization, trust in the leadership was highlighted as a facilitator. Leadership was important for structuring the conditions for the implementation of palliative care at the workplace. The professionals stated that the unit managers saw palliative care as a prioritized area and were positive towards change and development, which was a facilitator before the educational intervention (Study II). After the educational intervention the professionals stated that they had confidence in the leadership regarding the initiation of future education and improvement work. The manager boosted their creativity and let them participate in decision-making when there was an opportunity. A functioning leadership that controls the work was experienced as an important facilitator by the professionals. The manager had an essential role in influencing and encouraging everyone involved in the change to reject the negative attitudes that might appear among some of the professionals. It was good when the managers participated in the educational intervention, it could lead to their prioritizing future education (Study III).

Before the educational intervention, the professionals called for a structure in the nursing homes for the establishment of palliative care. There were different visions among the professionals: some wanted to create routines that all nursing homes in the municipalities should apply, others called for routines with regard to how other residents in the nursing home should be informed about the older person's death. There were also visions regarding the creation of a folder containing guidelines for procedures in palliative care situations that should be available to everybody at the workplace (Study II). The professionals considered it valuable that the educational intervention had given them the opportunity to discuss which routines were needed and how to design them. They had a chance to start discussing routines for the entire nursing home, which was an opportunity that seldom appeared during working hours. The advantage of having routines for palliative care at the workplace was that everyone had the same foundation to work from (Study III).

Future plans of further education

The plan further included dissemination to colleagues at the workplace so that everyone could attend and receive the education. The professionals saw the education in palliative care as a living project, that should continue after the intervention was completed. Some had already envisioned the structure of the future education in the form of its being delivered in half or full days or during planning days at the workplace. Other plans involved creating short-term palliative beds in the nursing homes and taking on a consulting role and offering support in palliative care situations in the municipality (Study II). After the education, the professionals expressed an uncertainty about the management's plans for continuing to improve palliative care. A feeling of an existing plan was emphasized by the professionals, however, they had not received any specific information about it. The professionals wanted to continue with the education in different forms such as study circles, creating routines and developing structures at the workplace. Some had thoughts of using different themes in the further education and some planned to modify and use the material from the intervention. The readiness for change was promoted because of the high motivation to spread the education further, but they waited for a clear message concerning when and how to continue the education (Study III).

The palliative care delivery

The results from the questionnaire of professionals' experiences in palliative care delivery showed significant increases in the case of both between and within group analysis concerning the intervention and control groups at follow-up. These increases were in the following areas: the use of a valid scale for grading symptoms; how often the next of kin were asked about their support needs, how often they received bereavement support and how often the older persons' wishes regarding place to die were documented; invitations to take part in conversations about the older persons' transition to palliative care; and how the older persons were treated (not taken seriously or treated nonchalantly; and offended or badly treated). At follow-up, the increases within and between group analysis concerning the intervention and control groups involved three of the five domains in the questionnaire: *symptom management*; *conversation and support*; and *encounter*.

In the domain *symptom management* significant increased frequency within both the intervention and control groups at follow-up was shown regarding the professionals' use of a valid scale to grade older persons' symptoms (p=0.005, p=0.034).

In the domain *conversation and support* the intervention group showed a significant increase concerning how often the next of kin were asked about their support needs (p=0.047), how often they received bereavement support (p=0.003) and how often older persons' wishes regarding a place to die were documented (p<0.001). In the control group there was a significant increase in bereavement support for next of kin (p=0.010) and in invitations to the next of kin to take part in conversations about the older person's transition to palliative care (p=0.003).

In the domain *encounter* significant increases were shown in the control group at follow-up concerning how often older persons were not taken seriously or were treated nonchalantly (p=0.028) and concerning how often they were offended or badly treated (p=0.040).

Regarding the between-group analysis in the three above-mentioned domains, significant increases were shown in the domain *conversation and support*. In this domain, the intervention group increased significantly more than the comparison group regarding documentation of older persons' wishes regarding a place to die (p=0.008). The opposite effect was shown regarding invitations to take part in conversations about the transition to palliative care. The control group increased significantly more than the intervention group (p=0.010).

Discussion

General discussion

The results of this thesis revealed the professionals' experiences of signs preceding dying and of the implementation of knowledge-based palliative care in nursing homes. It took a while before the professionals in the interviews could identify early signs preceding dying, which is interpreted as lack of awareness of an early palliative care approach in nursing homes. The professionals highlighted facilitators and barriers regarding the implementation of palliative care which it was important to consider when knowledge was to be inserted into practice. A positive attitude was present among the professionals both before and after the educational intervention, and both increased knowledge and team spirit were enhanced by the intervention. However, the evaluation of palliative care delivery shows sparingly significant increases within the following domains: symptom management; conversation and support; and encounter.

The main results can be understood in the light of the theory of organizational readiness for change (Weiner, 2009). The following general discussion of these results will be built on the concepts included in the theory: contextual factors (Study I); change commitment (studies II, III); change efficacy (studies II, III); and organizational readiness for change (Study IV). The focus is on the factors that may affect the effectiveness of the implementation in the nursing home context.

Contextual factors

The professionals reported difficulty in identifying early signs that precede dying in older persons (Study I). They were lacking awareness about an early palliative care, their knowledge being mostly concentrated on the late stage of dying in the older person. This is in line with previous reports (WHO, 2020). An integrative review by Iida and colleagues (2021) showed that a major barrier to the implementation and continuation of educational interventions is the variation in the knowledge and skills among the professionals. Insufficient knowledge among the professionals is also shown in a previous European study (Smets et al., 2018), where both assistant nurses and registered nurses were found to lack knowledge regarding both management of pain and weight loss. On a similar line the WHO (2020) has stated that there is insufficient access to palliative care for older persons due to lack of knowledge among the professionals. It is laid down in Swedish law (*SFS* 2017:30) that health care shall be of good quality and meet the individual's needs regarding continuity, security and ease of access. Nevertheless, the results from Study I confirm that the access is limited due to insufficient awareness about when palliative care should start. There is a competence gap concerning palliative care. The distinction that is made in Study I between early and late signs from the multidisciplinary team's perspective has not been made in previous research, which has been limited to specific professions and not taken account of the team (Brandt et al., 2005; Holmberg et al., 2019; Porock & Oliver, 2007; Sahlberg-Blom et al., 2013). Voumard and colleagues (2018) suggest that competence in both geriatric and palliative care is needed. The two types of care must be integrated from the day the older person moves into the nursing home. It is suggested by Voumard and colleagues (2018) that using geriatric palliative care as an approach in the nursing homes offers the possibility of strengthening the older persons' quality of life because two competences complement each other. The need to integrate palliative and geriatric care has increased, as also has the need for the appropriate training and education within the nursing homes setting (Gilissen et al., 2020; Payne et al., 2020). The review by Evans and colleagues (2019) shows that there is likely to be an integration of geriatric and palliative care in order to meet the multidimensional needs of the older person living with complex multimorbidity. This integration can enable an improvement in older person's quality of life by reducing the severity of symptoms (Evans et al., 2019). Study I explored the existing knowledge in this context and adequate knowledge among the professionals has an essential part to play when it comes to promote the readiness to change within an organization (Weiner, 2009).

In the nursing home context, the professionals had insufficient awareness of a palliative care approach in an early stage (Study I). Several studies emphasize that early planning and the application of such an approach can enhance the quality of life (Gaertner et al., 2012; Gorlén et al., 2013; Haun et al., 2017; Smith & Brown, 2017; van der Steen et al., 2014; Zimmerman et al., 2014). There needs to be an awareness of the benefits of a palliative approach early in the disease trajectory, primarily among healthcare professionals and next of kin but also among educators and decision-makers (Parikh et al., 2013). Such an awareness would warrant introducing the approach from the very beginning, as soon as the older person moved into the nursing home. This approach finds a theoretical grounding in Touzel and Shadd's (2018) model that describes a palliative approach in terms of three main parts: whole person care; quality of life focus; and mortality acknowledgment. One way to address how to apply an early palliative care approach is to use Sawatzky's (2016) conceptualization that embrace to adopt the expertise, knowledge and principles of palliative care throughout the whole illness trajectory as a process that is ongoing with the focus on chronic life-limiting conditions. It would be beneficial to use this conceptualization in nursing homes contexts where early identification is lacking.

Several reasons for the gap in knowledge have been discussed including the deficiency of national policies, initiatives and investment in development of palliative care in nursing homes (Smets et al., 2018). In a study by Cronfalk and colleagues (2015) the professionals referred to the difficulty of talking about death and the fact that they delivered palliative care without sufficient practical and theoretical knowledge. A study by Collingridge Moore and colleagues (2020) revealed that the care received towards the end of life depended on the length of stay in the nursing home. The older person who had stayed a longer time in the nursing home, revealed a higher quality of life in the last month of their life. This brings to mind what the professionals stated in Study II: a new way of thinking that involves palliative care as a process which starts long before the last days of the older person's life. The awareness of an early introduction of palliative care needs to be implemented in the nursing homes and can be connected to the context in the ORC theory (2009) where the knowledge is a part of. It is underlined in the literature that palliative care is to be seen as a process, but it is essential that all professionals have the same view of the process in order that there shall be collaboration in providing the best possible palliative care (National Board of Health and Welfare, 2013). The reasoning about palliative care as a process has been developed and such care has been newly described as involving a network built around the individual including the next of kin (Regional Co-operative Cancer Center, 2021). The insufficiency of knowledge in the context is not enough developed which may depend on the culture in the organization within the nursing home context. Both Nilsen and colleagues (2018) and Froggatt (2001) have stated that besides more knowledge among the professionals, a change in the culture in the nursing homes is necessary. It may be that the professionals are working according to "old" knowledge and the new way of thinking has not been established in the context. To be able to implement a sustainable knowledge-based palliative care in the nursing home there must be the development of a culture enabling the integration of such care with geriatric care as soon as the older persons move in.

The barriers that the professionals in Study II and III highlighted such as personnel resources, lack of time, financial resources and parallel development work, are barriers that are a part of the culture in the nursing homes. Palliative care was experienced as a matter of high priority to integrate into the culture in the nursing home. Similar findings are described in an integrative review by Iida and colleagues (2021) which paid attention to barriers and facilitators regarding the implementation and the continuation of educational interventions. The culture was crucial for the motivation among the professionals to carry out the intervention. A review by Manson et al. (2020) identified barriers and facilitators in respect of providing palliative care education in nursing homes, which revealed three themes: structural systems; cultural and interpersonal issues; and knowledge translation issues. The professionals will need to be flexible in order to overcome the barriers and should be involved right from the beginning of the education, to build a commitment (Manson et al., 2020). The ORC theory

(Weiner, 2009) points to the organizational culture as one of the contextual factors affecting the change valence. The key question is whether the professionals value the change in order to implement knowledge-based palliative care. The aforementioned barriers to change were constantly present in the organization, experienced both before and after the educational intervention. Despite the barriers, though, the professionals argued that palliative care was important and should be prioritized (studies II, III). According to the National Board of Health and Welfare's evaluation (2020) of the Government effort to increase staffing, the municipalities used money not only to increase employment but also to further develop improvement work for older persons within the organization. This can be an indication that the organizations value improvement work and that the development is continuing. This is in line with the ORC theory (Weiner, 2009), which states that the context such as resources can affect whether or not the members of the organization take action. The fact that the organization receives resources such as funding can contribute to increased readiness of change among the professionals. A qualitative evidence synthesis by McArthur and colleagues (2021) identified barriers to implementing evidence-based guidelines in long-term care and their findings (concerning time constraints, inadequate staffing, cost and lack of resources) were in line with the results of studies II and III regarding the barriers present in the organization. In a systematic review by Dryden-Palmer and colleagues (2020), who investigated the relationship between context, complexity and the implementation process, context was found to be an active ingredient that had an impact on the acquisition of new knowledge and on the implementation process. The context was described as an important factor that could influence the innovation and the recipients (Dryden-Palmer, 2020).

Change commitment

Change commitment such as the professionals' overall positive attitude to the educational intervention was interpreted in studies II and III (Weiner, 2009). It has also been identified in a previous systematic review (Chan et al., 2019) where the included studies showed positive effects on the participants' attitudes and knowledge after interventions in advanced care planning. This is in accordance with the ORC theory which states that if the members of an organization are positive towards adopting the action required for the implementation, a sense of commitment is achieved. Values refer to what we think should be done, and together with beliefs they produce an attitude (Weiner, 2009). Understanding the professionals' knowledge, attitudes and behaviours are the key to any implementation process (Price, 2015). The professionals valued the change and had hopes that it would result in a dissemination to their colleagues at the workplace (Study II). The fact that they valued the change indicates that change commitment was present in the organization (Weiner, 2009). Weiner (2009) sees the concept of organizational readiness for change as a "team property", a state where the members of the organization feel committed and confident in their collective abilities to bring about the change in question, and the results of studies II and III are in line with this. The professionals valued the educational intervention as high and were positive to the change which indicate that change commitment was present.

Another aspect that the professionals highlighted in the interviews was the importance of the leader in respect of the professionals' change commitment. They felt they had a credence to the leadership, and they experienced the support of the leaders, as positive. Leadership can be seen as a facilitator for readiness for change and as being of importance with regard to whether the professionals' value the change or not (Weiner, 2009). Here the motivation to change plays an essential role. If the leader cannot inspire the professionals to have a positive attitude to the innovation, the change commitment will be low, and this will most likely have consequences for the implementation. Thus, the leadership is valued as truly important for the professionals, and much is achieved if the manager pursues a permissive climate and for example includes the professionals in the decision-making process. This is also shown in previous research within the KUPA project by Nilsen and colleagues (2018) where the leadership was seen as a facilitator in the implementation because of the support given to the professionals in the development of evidence-based palliative care. Leadership as a facilitator is also shown in a study by McArthur and colleagues (2021), where the importance of actively supporting the members of the organization was underlined. When it comes creating an environment in the organization that supports innovation and change, taking into account the relationship between staff training and quality of care, leadership has an important role (Stolee et al., 2005).

Change efficacy

The WHO definition (2002) of palliative care implies a team approach to address the needs of patients and their next of kin. The professionals indeed highlighted collaboration as an important part of the palliative care (studies II & III), and teamwork can be seen as a part of the implementation capability needed to achieve change efficacy (Weiner, 2009). Before the education there were expectations of its providing an increased understanding of each other's professional roles, based on space for reflection and an increased communication (Study II) resulting in an enhanced team spirit (Study III). From the interviews it was plain that the team played an essential role in the palliative care. This is in accordance with the four cornerstones of palliative care based on the WHO (2002) definition, where both teamwork and communication are assigned a central position (Regional Co-operative Cancer Center, 2021). The WHO definition is reflected in the guidelines from the National Board of Health and Welfare (2013) which have the primary focus on life-threatening disease. The content of the educational intervention within the KUPA project is based on the WHO definition (2002). Recently the IAHPC (2018) formulated another definition with the focus on serious health-related suffering which expands the application to individuals with long-term progressive diseases, which is highly relevant for older persons. Today, many older persons live with multimorbidity over a long period, and with this new definition the focus is shifted from the disease to the older persons' needs. Both the team approach and the focus on vulnerable persons' needs have an important part to play in palliative care addressed to older persons.

In Study III the professionals indicated the importance of including the next of kin by discussing the palliative care with them, as also the importance of bereavement conversation and support after the older person's death. It is important that all the different professionals in the team should be invited to participate in the bereavement conversation. It could be beneficial not only for the next of kin but also for the professionals themselves and especially assistant nurses, who work close to the older person through the whole palliative care process (Alftberg et al., 2018). A study by Alftberg and colleagues (2018) highlights that assistant nurses did not initiate conversations about death and dying with the older persons by starting to talk about something else. After the educational intervention the professionals felt more secure in the encounter with the older person and the fear of talking about death and dying had disappeared (Study III). The WHO definition (2002) emphasizes the importance of striving to integrate the existential aspects of care in order to increase the quality of life.

The team in palliative care should consist of several professions to meet all the care needs of the individual. Communication within the team and with the individual and next of kin has an important part to enhancing quality of life (Regional Co-operative Cancer Center, 2021). A review by Manser (2009) that investigated the role of teamwork in health care showed that communication among the professionals is essential with regard to the patient's well-being and the quality of care delivered. Similar results are highlighted in a review by Campbell and colleagues (2020) where teamwork is linked with better quality of care. According to Stolee and colleagues (2005) the team have the responsibility for the dissemination of new knowledge and information in the organization and this collaboration could erase the hierarchy. The vision of reducing the hierarchy is also described by the professionals in Study III.

After the educational intervention the professionals described that the pedagogical method was appreciated and the opportunity to reflect and exchange experiences and ideas in a group was considered positive (Study III). They also had a positive attitude to the content of the intervention and further dissemination of the education to their colleagues. The content in the seminars was that the participants would share their experiences and knowledge through reflection over different care situations that have been complicated or positive. Between the seminars the participants had assignments to work on, applying their newly acquired knowledge in their organization (Benzein &

Ahlström, 2019). This is in line with interprofessional education whereby two or more professionals learn with, from and about each other (Barr et al., 2013). Interprofessional education can increase the collaboration between the professionals and increase the quality of care (Barr et al., 2017). Bui and colleagues (2020) have underlined reflection and the exchange of experiences and ideas among the professionals as an important part of a successful intervention. To reflect and discuss the values, current knowledge and skills, available resources and challenges to be faced can increase the effectiveness and outcome of an intervention. This is in line with the change efficacy characterized by Weiner (2009), where one of the determinants of implementation capability is task demands, which the professionals need to take the measure of if implementation of the change is to be effective. After the educational intervention, the professionals stated that changes could create resistance within the organization and it was important to market the education in a positive way, to promote its further dissemination (Study III).

Organizational readiness for change

The results of Study IV indicate that the nursing home organization had a readiness for change to certain extent, even though only a few improvements were shown. There were significant improvements at follow-up in the intervention group in the experiences of symptom management and of conversation and support, which indicates positive outcomes from the educational intervention. An increased frequency in the use of a valid scale to grade the older persons' symptoms was also shown at follow-up. This improvement can be explained by the fact that the professionals had acquired increased knowledge of older persons' symptom management in the educational intervention. Such knowledge is important inasmuch as previous research has shown that older persons are less likely to report such symptoms as pain, anxiety and nausea (Olden et al., 2011), which can make symptom management a challenge for professionals. Frailty and multimorbidity in older persons make it important to consider the most appropriate symptom assessment scale, and several different assessment scales were presented in the educational intervention within the KUPA project (Ahlström et al., 2018). Two examples are the Visual Analog Scale, measuring pain, and the Edmonton Symptom Assessment System, measuring for example anxiety, pain, fatigue, nausea, appetite, dyspnea and depression (National Board of Health and Welfare, 2013; Regional Co-operative Cancer Center, 2021). Due to the recent Covid-19 pandemic, the need of palliative care among older persons has come even more to the fore, and research has revealed that older persons, especially those with non-malignant conditions, had insufficient access to palliative care (Payne et al., 2020). When it comes to the palliative care for older persons in nursing homes during the Covid-19 pandemic there was a lack of holistic symptom management, staff training and communication (Gilissen et al., 2020). The results of Study IV showed an increased significant improvement in the domain conversation and support, concerning how often the next of kin were asked about their support needs and how often they received bereavement support. Next of kin occupy an important position in palliative care (Regional Co-operative Cancer Center, 2021). They need the support of the professionals to help them cope; and this includes bereavement support, giving them the opportunity to talk to those who have been caring for the older person. Within health and community care 72% of next of kin were offered bereavement conversation in 2018 (National Board of Health and Welfare, 2020). In a study by Ahlström and colleagues (2022) the quality of life among next of kin after the educational intervention within the KUPA project was investigated. The relationship with the professionals was described as good due to their spending plenty of time in the nursing home but there was disappointment over the lack of information about the dying process. A good relationship and collaboration between the next of kin and the professionals can be a facilitator and enhance the readiness to change in the organization (Weiner, 2009).

Weiner (2009) underlines initiation, persistence and cooperative behaviour as three important factors of effective implementation. Those professionals who resist the initiation of change, put insufficient effort into the implementation and have less persistence against challenges in the implementation contribute to a low readiness in the organization (Weiner, 2009). McArthur (2021) emphasizes the importance of support from the organization with regard to enable learning and the continuation of an education. One reason for there being few improvements after the education in Study IV could be the time aspect. Even if an evidence-based innovation is implemented successfully, it may take time for it to spread and have full effect in all parts of the organization (Berwick, 2003; Weiner, 2009). Despite this modest result lessons can be learned. Berwick (2003) has highlighted several factors in connection with the dissemination of innovations in clinical practice. One of them is the perceived benefit of the change. The fact that a group of 8–10 professionals participated in the seminars (Ahlström et al., 2018) in the case of each nursing home can have influenced the perceived benefit of the innovation and the change. In an implementation project the dissemination of the content of the intervention is an important goal (Berwick, 2003). The basis of disseminating innovations in health care is that the participants are aware of the benefits that the change is to bring. If they believe that the intervention can help them, there is a greater chance that they will adopt a more positive attitude to the change (Berwick, 2003). It may be that the professionals that did not attend in the seminars had a lack of belief in the education. This may have contributed to a slow dissemination. A compatibility with the individuals' beliefs, current history, needs and values is highlighted as important for a rapid diffusion (Berwick, 2003). It may also be that the professionals that did not receive the education did not think that it was needed, and some may have negative experiences of implementation in the organization. These factors could contribute to a slow diffusion of the innovation. Also, the complexity of the innovation can affect the rate of diffusion (Berwick, 2003).

The fact that there was only a slight improvement in the palliative care delivery after the education (Study IV) indicates that it is a challenge to put knowledge into practice, dissemination demands patience and plenty of time (Berwick, 2003).

According to Green and colleagues (2009) the context is one of the most essential aspects in implementation research. The context must be considered before the intervention is planned and initiated. More practice-based evidence is needed to achieve a more evidence-based practice (Green et al., 2009; Olswang & Prelock, 2015).

Research concerning organizational readiness for change within aged care settings has not been so extensively developed (Cummings et al., 2007; von Treuer et al., 2018). This thesis is one attempt to bridge the gap between research (on knowledge-based palliative care for older persons) and practice (in nursing homes) by highlighting the professionals' experiences, expectations and preparedness. The use of an educational intervention as an implementation strategy implies the importance of the training and education of professionals in respect of dying in older persons and the early introduction of palliative care. When it comes to overcoming the barriers existing in the organization an increased awareness of the importance of readiness for change among the professionals in nursing homes and an involvement of stakeholders and leaders on different levels becomes highly relevant. Olswang and Prelock (2015) have stated that the collaboration between researcher and stakeholders is important in the whole process of implementation. This thesis is one contribution to increasing the understanding of the professionals' perspective in connection with the implementation of change.

Methodological considerations

This thesis includes both qualitative and quantitative study designs. In order to evaluate the strengths and weaknesses, methodological considerations are necessary to highlight (Kazdin, 2017; Lincoln & Guba, 1985).

Trustworthiness

Trustworthiness refers to whether the data reflects the truth. For the qualitative studies (I, II and III) strength and weaknesses in the trustworthiness involves different elements: credibility; dependability; conformability; transferability; and authenticity (Guba & Lincoln, 1994; Lincoln & Guba, 1985; Polit & Beck, 2021).

Credibility

Credibility has to do with the confidence in the truth of data and how it is interpreted (Lincoln & Guba, 1985). The participants included in studies I–III had the ability to share their experiences of the phenomena under study and the planned number of focus group interviews can be judged as enough because of the richness of the data. A common way to determine how many focus groups there need to be is to interview three or four groups and thereafter decide if saturation is reached. It is often difficult to group the data and create concepts if saturation is not reached (Elo et al., 2014) but there was no difficulty of this type in studies I–III, categorization and abstraction was straightforward, which indicated well-saturated data. In Study I there were 4–6 participants in each group and 6–10 in Study II. In Study III there were 5–8 participants in each group after the drop-out of 9 (maximum 2 per group). According to Krueger & Casey (2015) is 5–8 participants the ideal size of a focus group. It often depends, though, on the topic and the experience of the participants. The fact that one of the groups in Study I consisted of only four participants might be seen as limiting the study's credibility. However, the participants in that group had totally nine years of experience of caring for seriously ill and dying persons. Having more than 10 participants in a focus group is not recommended because it is difficult to control such a large group and give all the participants the opportunity to express their views (Krueger & Casey, 2015).

Credibility is strengthened by the fact that all the authors discussed the interpretation of the results of the qualitative studies until consensus was reached. Using investigator triangulation involving several researchers in qualitative studies, can strengthen the credibility (Krueger & Casey, 2015; Richards, 2021).

The choice of analytical method in studies I–III depended on the aim of the study. In studies I and II the aim was to explore the existing research and the fact this research was limited made the use of content analysis highly relevant. In Study III there was the possibility of using an abductive approach on the basis of the conceptual framework shaped in Study II, combining inductive and deductive analysis and thus integrating surface with deep structure. The abductive approach makes it possible to distinguish deeper connections and penetrate beyond the apparent, which can reveal a richness of meaning reflecting the real underlying phenomena in clinical care (Erikson & Lindström, 1997). The findings of Study III made it possible with the pre-existing knowledge, discover the unexpected and create a new understanding after the educational intervention. The choice of method of analysis depends on the research question and has to be the method most appropriate for achieving the aim. Another important thing is that the data should be rich enough to use content analysis, which was the case in these studies (Elo et al., 2014). In Study II, examples of the analytical procedure are presented in a table so that the reader can evaluate the credibility of the content. Too broad meaning unit can contain various meanings a too narrow meaning unit can have consequences such as fragmentation (Elo et al., 2014).

The range of methods of content analysis (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005; Krueger & Casey, 2015; Krippendorff, 2018; Graneheim et al., 2017) used in the qualitative studies (I–III), both inductive, deductive and abductive (Table 1) strengthens the credibility in this thesis. A challenge with the use of an inductive approach solely is the risk of getting stuck in surface descriptions, structures and general summaries not offering new insights (Eriksson & Lindström, 1997). A challenge with the use of a deductive approach solely is the risk of formulating categories based only on established models or theories, with neglect of data not fitting into the theories (Eriksson & Lindström, 1997). Against the background of these challenges the abductive approach has an important part to play in research in nursing, where has been little used up to now (Karlsen et al., 2021).

Dependability

Dependability has to do with the stability of data over time and the researcher's decisions during the process of analysis (Lincoln & Guba, 1985).

The focus group interviews were assessed as a suitable data collection method for the qualitative studies because the collection of views and experiences would generate a broad knowledge and understanding of the professionals' perspective. The interaction in the groups worked out well and the participants confirmed each other's views during the discussions, and factors that strengthen the dependability is discussed below. One of the goals of focus group interviews is to maintain a permissive atmosphere (Krueger & Casey, 2015) and the settings that the interviews was carried out was calm and respectful, which meant that emotional views came up which might not otherwise have come up. There was also the recognition factor: recognizing what others said made it easier to talk about one's own feelings and thoughts (Krueger & Casey, 2015). Focus group interviews are educational because the participants gain new knowledge at the same time as they share their experiences (Krueger & Casey, 2015). However, in the beginning there was an imbalance in the dynamics of some of the focus groups due to the fact that only a few participants raised their opinions, which can be seen as a weakness. Thus, the moderator had an important responsibility seeing that all participants got the chance to express their point of view. Furthermore, the moderator had to beware of hierarchy in the groups, especially in view of the number of professions represented in the same interview (Kitzinger, 1995). Dependability was strengthened by the fact that the moderator used follow-up questions in the case of the participants that did not talk very much, as well as leading the participants back on track if they wandered off the subject. Dependability was also strengthened by the fact that all participants got the same structure: it was the same moderator and assistant moderator in studies I-III, using semi-structured interview guides based on the ORC theory (Weiner, 2009), with broad questions.

The researchers had a constant awareness of their pre-understanding to prevent the follow-up questions in the interviews being influenced. An integration of two or more researchers in the process of analysis is another way to strengthen dependability (Graneheim et al., 2017; Sandelowski, 2011). The integration of researchers with different educational backgrounds and different pre-understanding is a strength because it brings various reflections and interpretations from diverse perspectives.

Confirmability

Confirmability has to do with the objectivity of the data and the interpretation (Lincoln & Guba, 1985). One way to strengthen the confirmability was the use of quotations in the qualitative studies in order to enrich the descriptions. Quotations directly represent the participants' viewpoints and clarify the interpretation of the findings (Elo et al., 2014; Polit & Beck, 2021). A detailed description of the analysis process is provided in all the three qualitative studies, which should strengthen the confirmability. The results of the analysis were discussed and critically reviewed not only by the authors but also by a group of doctoral students and researchers in seminars with approximately 25 participants (Lincoln & Guba, 1985).

Transferability

Transferability has to do with whether the results can be transferred to other settings or groups than the original (Lincoln & Guba, 1985; Polit & Beck, 2021). The drawing of general conclusions and interpretation from the findings of qualitative studies must be done with caution because the goal is not generalization but an accurate presentation of the results. The reader is the one responsible for assessing whether the results are transferable to another context (Graneheim et al., 2017; Lincoln & Guba, 1985). In order to facilitate such an assessment a detailed description has been made of the participants, sampling, data collection and analysis in the studies (Elo & Kyngäs, 2008; Graneheim et al., 2017). However, there is a lack of background characteristics for the participants in studies II and III, which can be considered as a weakness in the transferability of the results of these studies. The background data collected covered gender and profession but not age and years of work experience as well, to further increase the opportunity of the transferability of the results. Another thing is that the great predominance of women in the focus groups limits the transferability to men. Furthermore, the limited number of participants with a Bachelor's degree limits transference of the results to specialist units, where the professionals on average have a higher degree of education. On the other hand, the fact that the participants in studies I, II and III were recruited from different municipalities in two counties and both urban and rural areas should be considered as a strength because it increases the transferability of the results.

Authenticity

Authenticity has to do with the extent to which researchers fairly and faithfully show a range of realities (Lincoln & Guba, 1985; Polit & Beck, 2021). Performing a content analysis is a time-consuming task that places demand on the researcher's knowledge and skills (Elo et al., 2014). The process of analysis also requires a commitment involving returning several times to the whole interview text to check the truth of the interpretation against the data. It is important that the researcher make space for self-criticism and reflection right from when the analysis begins, in order to be aware of unduly influencing it (Elo et al., 2014). The analysis process in the three studies in this thesis have been characterized by self-reflection among the authors.

Validity

Threats to validity have to do with factors that influence the nature and strength of inference (Shadish et al., 2002). For the quantitative study (Study IV) strengths and weaknesses will be assessed with reference to reliability, internal validity and external validity (Kazdin, 2017; Lincoln & Guba, 1985).

Reliability

Reliability refers to the consistency of the measure (Kazdin, 2017). One thing that can be a weakness and a threat to the reliability (and thereby also to the internal validity) is the variance in the formulation of the questions and in the response alternatives in the questionnaire used in Study IV. The questionnaire had questions with a response format involving 3–5 categories. The questions related to frequencies were answered on a four-graded Lickert scale (Lickert, 1932), from "everyone" to "no one". The questions related to "use of" were answered on a five-graded Lickert scale, from "never" to "always". A strength in using a Lickert scale is the attainment of a deeper level of detail when measuring feelings, attitudes or opinions, providing more nuance than yes/no questions (Lickert, 1932). However, a weakness in using a Lickert scale is that the multiplicity of choice can make the participant tired and thereby produce bias in the response. This is an important subject for a future psychometric study.

Another methodological aspect in relation to reliability is the reason for the significant changes in the responses of the control group at follow-up in Study IV. A possible reason is that the participants have already answered the questionnaire at baseline and have thereby acquire a greater awareness of different aspects of palliative care delivery which resulted in another answer at follow-up.

Internal validity

Intern validity refers to the extent that no other variables, apart from the independent variable, caused a change in the dependent variable (Kazdin, 2017; Polit & Beck, 2021). Statistical power is required when an existing relationship among variables is to be identified (Polit & Beck, 2021). The most usual way to achieve this power is to use a large sample. No a priori power calculation was performed, and this is a weakness, mainly because the outcome measure has not been used in previous studies. No information about the expected effect size could be estimated. However, the educational intervention was evaluated in different contexts (different nursing homes), and the aim of including professionals not participating in the educational intervention was to reach a high level of statistical power (Study IV). This design, though, requires effective dissemination within the workplaces (Berwick, 2003).

The development of the questionnaire was made by researchers with experiences in palliative care, psychometry and questionnaire design and evaluated in terms of content validity using cognitive interviews with professionals in different care contexts. The lack of more comprehensive psychometric testing of the questionnaire is an additional weakness, which decreases the internal validity of the results due to the fact that the instrument's validity is not known (Shadish et al., 2002). However, a face validity assessment was performed by four clinical nurses (three of whom are researchers) who are familiar with the KUPA project (Ahlström et al., 2018). They independently assessed the relevance of the items in the questionnaire to the educational intervention and this resulted in the specification of three domains: symptom management; conversation and support; and encounter.

The "Your experience of palliative care" questionnaire had items that were difficult for the professionals with limited or no education to answer, but these seemed more appropriate for nurses. It is possible that the results would have been different if the questionnaire had been more adapted to assistant nurses, who constitute the largest group of professions (84.5%) in this study. Therefore, the questionnaire needs to be reviewed in a psychometric analysis from the assistant nurse's perspective.

Follow-up measurement one month after the intervention may be a weakness since dissemination of an implementation takes time (Berwick, 2003). The treatment diffusion (Shadish et al., 2002) of the intervention is considered small since the control and intervention groups were from different counties and different implementers were engaged in the two counties. Furthermore, the same dose, five seminars were given during the same time interval in both counties.

External validity

External validity refers to whether the results can be generalized to another context (Kazdin, 2017; Lincoln & Guba, 1985). The generalizability of the results is a critical concern for evidence-based nursing practice (Polit & Beck, 2021).

One common threat to the external validity is selection bias (Kazdin, 2017). This makes it important to consider how representative the sample is for the population. In Study IV the participants' characteristics are presented (Table 3) and likewise the setting for nursing homes. There were no pre-existing differences in terms of sociodemographic variables in Study IV between the intervention and control groups at baseline as measured by the used Mann-Whitney U-test and Pearson's chi-square test. The risk of selection bias should have been less because of this. The clearer the description of participants and setting in a study, the greater the chance of generalizability of the results (Kazdin, 2017).

The inclusion of two counties and 30 nursing homes in different municipalities should be considered as strengthening the external validity. The nursing homes were in both urban and rural areas and the professionals that participated represented multidisciplinary teams consisting of assistant nurses, care assistants, registered nurses, occupational therapists, physiotherapists and unit managers. In Study IV, 93% of the participants were women and 84.5% were assistant nurses. This is in line with expectations in that assistant nurses constitute the largest group of professionals that work in nursing homes in Sweden and 90% of them are women (SKL, 2020; Statistics Sweden, 2022). These similarities increase the representativeness of the participants in the study (Polit & Beck, 2021)

Regarding the overall drop-out rate in Study IV (38.5%), the persons in the drop-out group differed significantly compared with those who fully participated: they were 2.8 years older and had 2 years more work experience. These differences can be seen as a weakness in the external validity. Considering the range of these two items, age (21–65 years) and work experience (0-44 years in the intervention group; 0-38 years in the control group), the assessment is that the differences are too small to affect the external validity. In sum, it may be said that the results can (with proper caution) be generalized to similar contexts and populations.

Conclusions and clinical implications

Conclusions

The results of this thesis show that there was a certain readiness for change present in nursing home settings and the professionals were willing to implement knowledge-based palliative care. At the same time there was a lack of awareness among the professionals with regard to introducing palliative care at an early stage in the disease trajectory. This indicates that the knowledge-based palliative care for older persons should be integrated with geriatric care. There are guidelines regarding palliative care, and they need to be implemented in nursing home settings and adjusted to the needs of older persons at the same time as the professionals need more knowledge about palliative care. The contextual factors play an important role in implementation, as a foundation for establishing readiness to change. Awareness of barriers can enable better planning and more effective implementation. Factors that can increase the readiness for change within the organization are team spirit, supportive leadership, reflection and well-considered pedagogical method. Finally, the sparingly improvements in the pre post intervention constitutes the professionals' experiences of palliative care.

The dissemination of an implementation requires time, which is one of the identified barriers in the nursing homes. The professionals' positive attitude to overcoming such barriers underpins their readiness to implement palliative care in the nursing home. This thesis indicate that leaders should support future implementation by acquiring a greater awareness of the professionals' experiences of factors related to change in order to attain an effective implementation in nursing home settings.

Clinical implications

When an older person moves into a nursing home, it is of great importance that the professionals integrate palliative care as a part of the care in the nursing home. This should involve learning about the older person's life history and preferences (which often means consulting the next of kin). When palliative care is brought to the fore right from the start, the possibility of the application of a palliative care approach early in the disease trajectory on the part of the professionals in the nursing home increases. Furthermore, end-of-life conversation should not be a one-time occurrence in the nursing home but should be repeated as often as seems appropriate since such continuity means that the older person's condition is followed, and several such conversations could help to make his or her remaining time the best possible.

There is need of an adaptation and development of the education in palliative care to give the professionals increased competence concerning the mixture of geriatric and palliative care and increased awareness and knowledge concerning the dying of older persons, this in order to improve the palliative care and enable it to be introduced at an early stage.

There is also a need for the professionals to be able to talk more about death and dying at the workplace. It was clear from the results that time and opportunity were limited when it came to sit down and exchanging experiences and ideas with the team concerning both practical and existential aspects of palliative care. It is very possible that certain worries and fears among the professionals would disappear if they had more chance to talk things over. There should, though, be a supervisor that can listen to what the professionals have to say and where appropriate to respond.

The findings of this thesis should also be valuable for all leaders in the area of health care regarding the professionals' readiness and addresses important factors to have in mind when a new project, idea or policy is to be implemented in an organization.

Future research

- The multidisciplinary teams in nursing homes found it difficult to identify early signs that precede dying. Therefore, the palliative care for older persons requires an increased focus on the frailty, multimorbidity and multifactorial symptoms, to support palliative care early in the disease trajectory. For this, further research is needed concerning effective implementation of guidelines about palliative care in nursing homes setting.
- It would be beneficial to investigate the professionals' experience of the implementation of knowledge-based palliative care and of palliative care delivery at several time-points after the educational intervention is finished, for example in 6–12 months, especially in view of the fact that it takes time to implement a change in practice.
- Due to the only slightly improvements in the palliative care delivery, it would be of value to plan for coaching for 12 months after the educational intervention. The coach should be a person with education and work experience in both geriatric and palliative care, for example a registered nurse. The coaching would surely contribute to a more sustainable dissemination of the implementation, due to the continuous and supportive contact it would provide. Research involving follow-up measurement after coaching would be valuable.
- It is highly relevant and important to investigate the palliative care delivery from the older persons' perspective, by evaluating their experiences 6–12 months after the implementation.

Summary in Swedish

Världens befolkning blir allt äldre vilket medför att behovet av palliativ vård kommer att öka. Detta ställer högre krav på den palliativa vården som de äldre har visat sig ha sämre tillgång till. En anledning till detta kan vara svårigheter att identifiera när palliativ vård ska införas, då en äldre person oftast har en multisjuklighet med komplexa vårdbehov under en längre tid. För att kunna tillgodose kraven på en god palliativ vård för äldre personer behövs kunskap om den äldre personens döende och en medvetenhet om att palliativ vård behöver introduceras tidigt i sjukdomsförloppet, i särskilt boende. En introduktion av palliativ vård i tidigt skede förväntas öka livskvaliteten och delaktigheten i vården för den äldre personen. Det föreligger ett stort behov av kunskap om effektiva metoder att implementera forskning i äldreomsorgen på särskilda boenden och integrering av kunskapsbaserad palliativ vård. Det övergripande syftet med denna avhandling var att utifrån personalens perspektiv utforska upplevelser av tecken som föregår döendet hos äldre personer och av implementering av kunskapsbaserad palliativ vård genom en utbildningsintervention i särskilda boenden. Avhandlingen bygger på fyra delstudier, med både kvalitativ (Studie I–III) och kvantitativ ansats (Studie IV). Samtliga studier var en del av implementeringsprojektet *Införandet av kunskapsbaserad palliativ vård för äldre personer i särskilda boenden* (KUPA), som inkluderade en utbildningsintervention i två olika län i Sverige mellan åren 2015 och 2017.

I avhandlingens första delstudie genomfördes fyra fokusgruppsintervjuer för att utforska det multidisciplinära teamets erfarenheter av tidiga och sena tecken som föregår döendet hos äldre. Totalt deltog 20 personal, som representerade professionerna vårdbiträden, undersköterskor, sjuksköterskor, arbetsterapeuter, fysioterapeuter, biståndshandläggare samt enhetschefer. Data analyserades med latent kvalitativ innehållsanalys. Resultatet visade att personalen såg döendet som en händelse och inte som en process och de hade en bristande förmåga att identifiera och tolka tidiga tecken som de äldre uppvisade. Dock ökade medvetenheten kring tidiga tecken vid fokusgruppsdiskussionerna och flertalet exempel lyftes fram, såsom ökad sömn och minskad fysisk förmåga. De sena tecknen var personalen väl medvetna om och lyfte fram flertalet exempel såsom minskad cirkulation och medvetslöshet.

I den andra kvalitativa delstudien, utforskades personalens förväntningar och beredskap inför att implementera kunskapsbaserad palliativ vård i särskilt boende före en utbildningsintervention. Sex fokusgruppsintervjuer genomfördes med totalt 48 personal. Insamlade data analyserades induktivt med kvalitativ innehållsanalys.

Resultatet visade att personalen hoppades erhålla en ökad kunskap och en samstämmighet i teamet genom utbildningen. Att ha tillit till ledarskapet och organisationen ansågs underlätta implementeringen av utbildningsinterventionen. Det fanns dock tvivel hos personalen att kunna åstadkomma en förändring i praktiken, på grund av hinder såsom otillräcklig ekonomi, parallellt pågående utvecklingsarbete, otillräckliga personalresurser och brist på tid. Trots detta, hade personalen en stark framtidstro till utbildningen och dess spridning.

Den tredje kvalitativa delstudien undersökte personalens upplevelser av beredskap för förändring att införa kunskapsbaserad palliativ vård i särskilda boenden efter utbildningsinterventionen i KUPA-projektet. Sex fokusgruppsintervjuer genomfördes med totalt 39 deltagare och insamlade data analyserades abduktivt, d.v.s. både deduktivt och induktivt. Resultatet visade att personalen hade positiva upplevelser av utbildningen och upplevde att de erhållit beredskap för förändring trots kvarvarande hinder i organisationen. En ökad kunskap och medvetenhet om både anhörigas delaktighet, kommunikation inom teamet hade uppnåtts och även teamkänslan upplevdes förbättrad av personalen. Hopp om att kunna fortsätta med utbildningen i de särskilda boendena efter KUPA-projektet kvarstod, även om klara besked saknades om när och hur detta skulle ske.

Den fjärde delstudien var kvantitativ och utvärderade personalens upplevelser av att ge palliativ vård före och efter utbildningsinterventionen i särskilt boenden. Studien hade en pre-post intervention design och totalt inkluderades 289 personal. Resultatet visade att utbildningsinterventionen hade förbättrat personalens upplevelse av att ge palliativ vård i särskilda boenden inom domänerna; symtomlindring; samtal och stöd; samt bemötande.

Sammantaget lyfter avhandlingen fram resultat som visar att personalen på särskilda boenden har en bristande medvetenhet om att identifiera tidiga tecken hos äldre personer som föregår döendet. Resultatet visar också att både före och efter utbildningsinterventionen upplever personalen en beredskap för förändring trots hinder i organisationen. Det behövs ökad kunskap hos personal i särskilt boende om döendet hos äldre personer och av betydelsen att införa ett palliativt förhållningssätt tidigt i vårdprocessen. Dessutom visar avhandlingen med hjälp av Weiners teori på vikten av att undersöka beredskapen för förändring hos personalen som arbetar i särskilt boende, före och efter att en utbildningsintervention implementerats i organisationen. Att beakta och identifiera både hinder och möjliggörande faktorer inför en implementering kan vara av stor vikt för ledare då nya idéer, policys och riktlinjer ska införas eftersom kunskap om personalens beredskap kan främja och öka möjligheten att uppnå en effektiv implementering.

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