Nursing Education in Palliative Care: content, effects and implementation

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CONTENTS

Chapter 1

General Introduction

PALLIATIVE CARE

This thesis reports on several studies concerning nursing education in palliative care, both at undergraduate level (bachelor) and at postgraduate level.

Palliative care can be defined as an approach that improves the quality of life of patients and their families facing the problem 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. It uses a team approach to address the needs of patients and their families. It integrates the psychological and spiritual aspects of patient care and provides relief from pain and other distressing symptoms. Palliative care affirms life and regards dying as a normal process (WHO, 2002).

The specific character of care for people for whom curative treatment is no longer possible, was first paid attention to in the UK when Cicely Saunders, a former nurse, founded St Christopher's Hospice in 1967. The hospice was equipped to adequately support people in their final stage of life both medically and psychosocially in a non-clinical and homely environment, where not the curative treatment of a hospital environment was predominant (Lugton & Kindlen, 1999). At that time the greater part of the people died in the UK in a hospital, although even then people preferred to die at home. From the hospice palliative care in the home situation was therefore also provided by specially trained nurses.

In the hospice attention was not only paid to patient care, but also to research and promotion of expertise of the health professionals. In this one aimed at getting more insight into the needs of palliative patients and their family to improve the interventions in palliative care. The question what good care during the final stage of life should involve became more urgent in view of social developments such as increasing greying, changing family relations, changing views on illness, suffering and death and related ethical issues considering justice, respect and autonomy (Clark & Seymour, 1999).

Palliative care in the Netherlands only got going since the years ninety. The first hospice in the Netherlands was established in 1994. The government concentrated on the development of palliative care policy at the end of the nineties. By formulating that policy the government joined in the European developments. The members of the Council of Europe adopted a document in 2003, with recommendations concerning the organisation of palliative care in which the importance of a coherent policy concerning palliative care in the different countries was underlined (Council of Europe, 2003). Main point was that every healthcare provider should be aware of the basic principles of palliative care.

Figure 1:   Appropriate care near the end of life.
            Source: Lynn & Adamson (2003)

Conventional Model

S
U
M

O

F

| Agressive care | Palliative care or Hospice |

⟶ Time   Death

T
R
E
A
T
M
E
N
T

Improved Model

Disease modifying, 'curative care'

Living well with disease 'palliative care'

Bereave-ment

Palliative care like also is indicated in the WHO-definition can be considered in increasing degree as care that can already be started beside care and treatment aimed at curation. As the course of the disease progresses palliative care is increasingly aimed at quality of life and learning to live with the disease and its consequences (see figure 1). In many cases no clear marking point can be given where curative care turns into palliative care. Lynn & Adamson's model (2003) indicates that the principles of palliative care are already applicable in an early stage of the disease and can go together with therapies that are initially aimed at the prolongation of life. As the palliative process progresses the relief of symptoms will get more attention; the family care becomes more intensive. Therefore a system approach is important (Visser, 2006).The period of bereavement is a conclusive component of this care, in which attention is focused on counselling of the bereaved in order to assist them in the mourning process. The course of the disorder affects the design of the palliative stage. Then a distinction can be made between different kinds of disorders. Cancer is characterised by a short period of decline taking several weeks to months, chronic diseases such as heart and lung disorders have intermittent periods of deteriorating condition that may last for years. In case of dementia and geriatric frailty health decreases more gradually (Lynn & Adams, 2003).

Palliative care is not restricted to a certain setting but takes place in different environments, both at home, in hospitals, in nursing and old-people's homes, in psychiatry and in hospices. In principle palliative care is of a multi-disciplinary nature; as core disciplines the doctor and the nurse can be regarded. In case of more specialised palliative care other disciplines can be involved, if desired, such as the social worker, the physiotherapist and the spiritual carer (Ahmedzai et al., 2004). Besides informal care volunteers play an important part, especially in the home situation and the hospice, where they provide a large part of the non-specialist care. Without family care palliative care in the home situation is almost impossible (Francke & Willems, 2000). Frequently palliative patients have to be hospitalised after all, because the problems cannot be handled in the home situation or because sufficient family care is lacking. More than half of the home patients moves in the last months for dying still to another setting because of acute medical problems, lack of professional home care or overload of the informal carers (Visser, 2006)

More than 50% of the patients get personal care of professionals three months for the death, in almost half of the cases combined with informal care. This runs up to 75% in the last three days for the death. Here always doctors, nurses and nurse assistants are involved (Visser, 2006). In palliative care one works both multi-disciplinarily and interdisciplinarily. With a multi-disciplinarily working team the patient's problems are approached from the expertise of different disciplines and everyone keeps his own responsibility. When people work interdisciplinarily the borders fade and within a transitional area they take over duties from each other. It involves joint problem-solving, reporting and responsibility (Clark et al., 1999).

In Europe palliative care is considered as general care, which means that every professional health-care provider must be able to provide care for palliative patients in different healthcare services. General care promotes the accessibility and availability of palliative care. General healthcare providers must have the opportunity to consult specialist providers of palliative care for complex problems. These problems may arise when several symptoms occur beside each other, which require a balanced treatment. But complexity of the palliative situation can also be caused by ethical dilemmas or an organisation where several disciplines and several care providers are involved in, making high demands on continuity of care. Palliative care is in spite of the increase of other chronic diseases often improperly associated with cancer (Ahmedzai et al., 2004). McIlfatrick (2007) ascertained in a needs appraisal among patients, informal caregivers and healthcare professionals an inequality when the provision of care to cancer patients is compared with care to patients with other disorders. The services to cancer patients are more accessible and better developed.

People with cancer die more often at home, possibly because they are earlier dismissed from the hospital and they are better prepared on the last period of their life (Emanuel et al., 1999). For these type of patients more frequently family care as well as professional care are available (Klinkenberg, 2004).

NEED FOR PALLIATIVE CARE IN THE NETHERLANDS

People live longer and longer and the number of people reaching a very high age is increasing. The increased medical-technological developments and the emphasis on safety aspects in e.g. traffic play an important part in this. Moreover the acute death from heart diseases and CVD has decreased. This means that the causes of death shift from acute to chronic (Mackenbach & Van der Maas, 2004).

With the increasing age people more and more often suffer from chronic diseases, that can have a prolonged course after a possibly acute beginning. Globally the top five of these diseases is made up of heart disease, cerebrovascular disease, chronic respiratory disease, respiratory infections and lung cancer (Council of Europe, 2003; Davies & Higginson, 2004). These diseases all have a for them characteristic development, in which the chronic phase after a shorter or longer period gradually turns into the palliative phase. During this phase an appeal is made to palliative care. Moreover comorbidity increases as people reach a higher age. Thus more than 11% of the over-eighties suffers from a form of dementia; for the over eighty-fives that percentage has increased to almost 24% (WHO, 2006).

The majority of people wish to die at home (Higginson & Sen-Gupta, 2000). The need for palliative care in the Netherlands is comparable with the European situation. In the Netherlands people suffer most from heart diseases and cancer (CBS, 2005), but there is a similar picture here of increasing greying and a decrease of death from acute diseases as coronary thrombosis or CVD. One does survive an event like this, but lives on with lingering symptoms. This means that

the need for palliative care will continue to increase. It is expected that between 1997 and 2015 this will increase by 20%, from 55,000 to 66,000 people a year who will appeal to this care in the form of suitable facilities, adequately trained professional caregivers and available volunteers (Francke & Willems, 2000).

People want to stay as long as possible in their familiar environment, but are often not acquainted with the different facilities that are available to them (Van de Akker et al., 2005); 75% in the age category of 35-64 and 65% of the people over 65 want to die at home. When this trend continues it means that the need for dying at home will increase in the future. As most desirable alternative for the home situation hospices and almost-home houses are mentioned.

It is estimated that currently a quarter of all people dies at home, a third dies in a hospital and a fifth in a nursing home (Francke & Willems, 2000; CBS, 2005). Cancer patients die more often at home, especially when both family care and professional care are present (Klinkenberg, 2004). Only 1% dies in a hospice. Often people appear to be unfamiliar with alternative possibilities or one tries to avoid them as they are experienced as stigmatising (Van de Akker et al., 2005).

POLICY DEVELOPMENTS

An expected need for palliative care, while the facilities and the expertise of the health professionals were not equipped for that, caused the government at the end of last century to reconsider the infrastructure, especially with regard to facilities and support structures. Moreover attention focused on the promotion of expertise of caregivers. A special development programme Palliative Care in the Terminal Stage was started that financial means were reserved for (De Korte - Verhoef, 2004). This programme was aimed at integration of specific palliative terminal care structures in the regular facilities. Moreover the programme consisted of a number of innovative projects to improve the palliative care content.

In 1997 six regional centres for palliative care were founded (COPZ), which in 2003 turned into the integral cancer centres. It was the objective of the six centres to come to structure adaptation and care coordination of palliative care, as well as the promotion of knowledge development and expertise with the professional caregivers and volunteers involved. One would have to link up with specific regional needs.

The structure adaptation has led to an extension of the number of palliative terminal facilities. Apart from hospitals an increasing number of nursing homes, old peoples' homes, hospices and almost-home houses with adapted terminal facilities have been equipped for palliative care (Mistiaen & Francke, 2004). Moreover a regional support structure of the palliative care providers has been developed and specialist regional consultation teams give consultations to care providers in complex situations on request.

In an evaluation of the policy with regard to palliative care it could be concluded that most interest was until then (2004) paid to palliative care for oncology patients, as they formed the biggest and most recognizable group. Other

target groups needing palliative care, such as patients with terminal chronic diseases, but also the mentally handicapped, people growing demented, migrants and children, have received much less attention, so that it is less known of them how this care would have to be filled in. It was moreover concluded that there was little insight into decision-making during the final stage of life, that the influence of co-morbidity was unclear and that there were no indicators for good palliative care. The recommendations as a result of the evaluation were aimed at the further development of especially these areas.

THE NURSE AS PALLIATIVE CARE PROVIDER

Palliative care is an essential part of the nursing care that can be delivered at different levels of complexity (De Vlieger et al., 2004a). The nurse has a role that depends on the way in which the delivery of care has been organized and often has apart from a substantive task also a coordinating role (Campbell et al., 2005; Davies & Higginson, 2005; Peters & Sellick, 2006). The effectiveness of the interventions also depends on the organizational structure; palliative multi-professional consult teams and home care lead to more patient satisfaction and a better quality of life (Goodwin et al., 2002; Gysels & Higginson, 2003).

Nurses find it difficult and emotionally heavy to deliver palliative care to patients and often do not feel competent enough (Cooke,1996; Linder et al., 1999; De Veer et al., 2003; White et al., 2004). Looking for a balance between commitment and distance in order to survive emotionally is a difficult task. Dealing with pain and palliative sedation is aggravating and can give feelings of powerlessness. (Morita et al., 2004; Beel et al., 2006; Sandgren et al., 2006). Nurses as well as other healthcare workers often feel not well-prepared for their task in palliative care and are much in need of more expertise in the field of pain and symptom management, communication and dealing with ethical dilemma's. Informal caregivers need practical support and help with stress reduction by professionals; they are regularly involved in pain and symptom management, but often do not know very well how they have to interpret symptoms and what signs they have to pay attention to, especially in the home situation. They would moreover like to be supported in the coordination of the care when many different care providers are involved (Armes & Addington-Hall, 2003; Yates et al., 2004; Andershed, 2006; Osse et al., 2006). Giving support to informal caregivers can be considered a task for the nurse.

EDUCATION OF NURSES

The WHO is of the opinion that research and training in palliative care should be considered a priority and funded in line with that for potentially curative interventions (Davies & Higginson, 2004). In the Dutch government policy too it is emphasised that training in palliative care needs attention and has to lead to further competence development with caregivers.

Nurses employed in palliative care indicate that they need education in the fields of communication with the patient himself and his family, pain and symptom management and with regard to ethical aspects (Brazil & Vohra, 2005; McIlfatrick, 2007). Apart from knowledge and skills it is also important to pay attention to the development of an adequate death attitude, because professionals find it difficult to deal with dying patients. (Wear, 2002)

At a European level a competence profile for palliative nurses has been developed. In this three competence levels can be distinguished (De Vlieger et al., 2004b).

A. Basic competences for nurses in training and nurses working in a general healthcare setting
B. Advanced competences with regard to nurses working in specialist palliative care, such as a hospice or a specific unit for palliative care.
C. Specialized competences by nurses having a consultative position and occupying themselves with (intervention)research

Study programmes within these three levels should concentrate on five areas of special interest, i.e. the patient, the family, the team, society and the healthcare structure. As to a number of themes subjects with regard to the patient and his family are relevant to all three levels of competence. The subject of pain is an example of this. The complexity of the problems is directive for the adequate employing of the desired level (see scheme 1).

With subjects that are aimed at the team, society or the healthcare structure, more distinction between the levels can be made. In these areas of special interest are especially emphasised the competence levels of the advanced students and the specialists.

Scheme 1: From: European standards for the training route of Nurses in Palliative Care (De Vlieger et al., 2004b)

Patient level	Level A	Level B*	Level C	Interdisciplinary team level	Level A	Level B	Level C
Multi-dimensional aspects of pain	x	x	x	Roles and responsibilities of the team members, volunteers and family		x	x
Measure-ment instruments to evaluate pain	x	x	x	Group dynamics and leadership		x	x
Pain treatment	x	x	x	Influence of patient and family on group dynamics		x	x
Opiates	x	x	x	Negotiation and support in team conflicts		x	
Opiate rotation		x	x	Netrworks			x
Indications for choosing the opiates		x	x	Advice and consultation			x
Information to patients on the use of opiates	x	x	x	Methods to introduce changes in the team		x	x
Pain management in geriatrics and paediatrics		x	x				

* The Dutch Palliative Care Association for nurses makes a difference between level B and level B+. Nurses who function on level B+ are experienced in palliative care and are able to exceed the ward level.

The studies in this thesis mainly concentrate on level A and level B courses, with level A courses being related to undergraduate education and level B courses to postgraduate education, for course participants who provide care to palliative patients regularly.

EDUCATIONAL EFFECTS

In the palliative phase several interventions are important. There is evidence that educational interventions with regard to the applying of pain directives can lead to pain relief with palliative patients (Allard et al., 2001). Effective communication between caregiver and patient has a positive influence on his/her well-being and performance (Stewart, 1996). Training can lead to an improvement of communicative skills (Fellowes et al., 2003).

The effects of palliative courses on different levels can be measured both with the students themselves and with the patients. A frequently occurring outcome indicator is the satisfaction of the student him/herself with the education and self-perceived knowledge (Jordan, 2000). This measurement however, gives little indication of the really increased knowledge and the application of what has been learnt in practice. Whether the knowledge level has really risen can be measured with a pre-post design, where the outcomes before and after the course have to be compared in order to determine an effect or with a controlled study with a comparison of the effects of the experimental group with a similar control group which has not passed through the course. Application in practice becomes visible in a better performance with regard to the outcome indicators such as an improved communication or the application of a pain-measurement score. Also with regard to these outcomes a comparison with the situation before and after the course and a comparison with a control group of caregivers who did not follow the education gives more reliable indications on the effects than an isolated measuring only. Data-triangulation is an important method to increase the internal validity of an educational study with.

The effects of the education on the acting in practice are however influenced by a number of confounding variables such as the support of the manager and the work pressure experienced on the ward (Francke et al., 1997; Wilkinson, 1999). Effect measurement of promotion of expertise of professionals with patients in the clinical situation is not a simple matter. The patient care is usually no individual matter, but is given by several professionals in mono or multi-disciplinary teams, that usually have not all received training in a team. Effect measurement moreover causes problems in view of the nature of the palliative care. Usual effect measures in the sense of clinical effectiveness such as mortality, morbidity and survival rates are not suitable (Robbins, 1998). Increasingly attention is paid to the patient's perceptions with regard to his quality of life and his preferences, but with these outcomes too, many intervening variables can be pointed out that obscure the direct effects of education.

Caregivers themselves moreover appear to keep palliative patients from participation in effect research in view of the presupposed impact (Jordan, 2000; Murray et al., 2000). Patient care itself has priority and the palliative care setting itself is usually small, so that it is difficult to let sufficient patients participate (Field et al., 2001). So in order to let effect measurement take place with patients in controlled circumstances in stead of real patients simulated patients are often

employed. The reactions of this category of patients are largely comparable to those of real patients.

So a review with regard to effects of palliative courses seems to be obvious to get an insight into relevant educational themes and in the way of evaluation and the use of instruments.

SUITABILITY OF MEASURING INSTRUMENTS

The suitability of measuring instruments for measuring the effects of palliative education refers to the methodological suitability for measuring the desired outcome (validity and reliability). These measuring instruments have to be congruent with the objectives of the education and have to be used to give students feedback on the level of their competences in palliative care (Van Berkel, 1999).

When the desired outcome is the student's increased knowledge level, a knowledge test is adequate. It is then supposed that more knowledge leads to better acting in practice and that improved acting is not realised without knowledge. The knowledge test has to involve questions on the relevant themes of the course (relevance and representativeness requirements), for which the opinion of subject specialists is important (face validity). One of the studies in this dissertation is aimed at the validating of a knowledge and insight test.

In this respect the concept of self-efficacy is also important. Self-efficacy involves the belief of an individual in their capabilities to perform at a desired level (Bandura, 1997). The individual's degree of self-efficacy is context-specific and influences the acting. Because of the specificity of this concept the measurement has to take place via an instrument adapted to the subject.

Many palliative courses are aimed at the improving of communication skills in the conversations with palliative patients. A valid measuring instrument has to be aimed at the measuring of the communication process itself, with the use of video or audio-recording being suitable methodologies. Attention should be paid to reduction of the scoring subjectivity and the validity of the instrument itself by choosing the right items (Streiner & Norman, 2001).

With regard to the measuring of communication of caregivers with oncological and palliative patients one can focus on specific points of interest within the communication, such as empathy and death attitude. Also with regard to these concepts it is important that one is attentive to the psychometric quality of the measuring instrument.

IMPLEMENTATION OF A CURRICULUM PALLIATIVE CARE

It is important to develop adequate programmes in the field of palliative care for doctors and nurses at all levels, as these disciplines are seen as core disciplines (Ahmedzai et al., 2004). This view was endorsed by the Dutch government and

was therefore characterized as spearhead of policy in the special development programme Palliative Care in the Terminal Stage. Within this scope programmes of study have been developed for various levels of care-assistants, nurses and physicians. One aspired to offer these programmes as 'golden standard' to all relevant educational organisations, so that national univocality of the educational competences to be achieved for the different health professionals would be feasible.

However, with this starting point an implementation problem presents itself, as this involves centrally developed innovations that have to be implemented decentrally, which results in an increase of the complexity of the innovation (Van Linge, 2006). With the developing of education an accompanying implementation track is not automatically reckoned with (ETEC, 2005). A number of influencing factors can be distinguished playing a part in the stagnation of such an implementation. With sufficient attention for these implementation factors the centrally developed palliative care education for nurses would have to be made available for a broad target group, so that nationally at least a minimum level could be guaranteed for this professional group.

RESEARCH QUESTION AND OBJECTIVE

The aim of this study is to determine the effects of palliative care training courses with the use of valid and reliable instruments and to give recommendations concerning an adequate implementation strategy of these courses.

The research questions are focused on five elements: literature review, course content, usefulness of measuring instruments, course effects and implementation:

In a literature review over a period of 1990-2005 an overview is given of studies into effects of palliative care courses. In this we focus on the most relevant themes in these courses, i.e. communication, with specific attention for empathy and death attitude, pain, and combined courses involving several subjects in the field of palliative care. This literature study corresponds with the first research question.

1. What is known in the literature about the teaching methods, content and effects of palliative care courses for nurses and which measuring instruments are used with this effect measurement?

A second type of research question is directed at the content of a postgraduate course in palliative care. This content is derived from needs of patients and informal caregivers and requirements of the nurses. With the description of the content attention is paid to the teaching method with the starting-point that this has to be promotive to implementation of what has been learnt at the ward.

2. What content of a postgraduate course in palliative care is relevant within the scope of needs of the patients and their family and the requirements of the nurses?

With regard to suitable instruments the methodological qualities of three different types of instruments have been investigated as they refer to three angles relevant to palliative care.

The Palliative Care Quiz for Nurses (PCQN) is an instrument measuring knowledge and insight from the assumption that knowledge is at the root of acting. This instrument is extended and adapted to the Dutch situation.

The Self Efficacy Test Palliative Care (SEP) is an instrument that has been designed specifically for the measuring of self-efficacy with regard to the providing of palliative care. It is assumed that the degree of self-efficacy with regard to palliative care influences the actual performance of the student on the ward.

The Staff Patient Interaction Scale for Palliative Care Nursing (SPIRS-PCN) is an instrument measuring the degree of empathy via a paper and pencil test where the respondent indicates in writing how he/she would respond to the also written statement of the patient. This statement is an expression of feelings that play a part with palliative patients, such as anger, hope and fear. We consider empathy an important factor in the communication with the patient and his informal caregivers when providing adequate palliative care. It is assumed that the score of this test is positively related to the degree of empathy that the nurse shows in the real situation.

The following three research questions are focused on instrument validation.

3. Is the modified PCQN (PCQN-C) a valid and reliable instrument to measure knowledge and insight with?
4. Is the Self-Efficacy Test Palliative Care (SEP) a valid and reliable instrument to measure self-efficacy with?
5. Is the SPIRS-PCN a valid and reliable instrument to measure the expressed empathy of nursing students with?

The fourth cluster of research questions concentrates on the effects of educational programmes, both at Bachelors level and at postgraduate level within the scope of continuing education. In the Bachelors programme it is investigated whether the level of empathy increases during the study programme and whether variables like a specific communication course and practice experience play a part in it. With the postqualification course the effect measurement refers to the knowledge and insight level and the level of self-efficacy. This results in the four following specific research questions.

6. What is the development of the level of empathy in students during a Bachelors programme in nursing?
7. Has a specific course on communication skills within a Bachelors programme a positive effect on the students' level of empathy?
8. What are the effects of clinical experience within this programme on the students' levels of empathy?
9. What are the effects of a post-qualification course in palliative care considering knowledge and insight and considering self-efficacy?

The fifth cluster of research questions concentrates on the implementation of a palliative care curriculum for the benefit of the HBOV. This programme is developed by one professional university with the intention of implementing it nationally. In a descriptive design it is investigated how much time is currently spent in the curricula on palliative care and which Bachelors programmes have implemented the centrally developed curriculum.

10. Which themes in the field of palliative care are noticeable in the Dutch Bachelors programme in nursing (HBOV)?
11. To which extent is a recently developed curriculum palliative care used and what are the influencing variables?

OUTLINE OF THE THESIS

The thesis pays attention to the five starting points mentioned in the order described before.

In chapter 2 the literature review is described to get an overview of what is known with regard to the effects of palliative care courses for nurses.

In chapter 3 a postgraduate course palliative care comes up, the content of which is based on the needs of patients and nurses and the design is aimed at implementation of what has been learnt on the ward.

Chapters 4 and 5 are of a methodological nature. In these chapters the psychometric qualities are described of several instruments relevant to the effect measurement of palliative courses, which describe divergent qualities: knowledge and insight, self-efficacy and empathy.

Chapters 6 en 7 contain studies into the effects of courses. Chapter 6 describes a study of the effects of an HBOV-programme and more specifically the components of clinical experience and a communication course on the empathic quality of the student. In chapter 7 the effects of a postqualification course on knowledge and insight and self-efficacy are described.

Chapter 8 focuses on the implementation of a palliative care curriculum and more particularly which factors played a part in this and in what way palliative care has been included in the different curricula of the HBOVs.

Chapter 9 comprises the summary, discussion and final conclusion.

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Chapter 2

The content and effects of palliative care courses for nurses: a literature review

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ABSTRACT

Objectives: The present literature review describes the literature (1990-2005) that concerns the effects of courses in palliative care at the pre- and postgraduate levels.

Data sources: A search was made for literature from the period between 1990 and 2005 using CINAHL, Pubmed and Psychlit, supplemented with a search for relevant systematic reviews from the Cochrane Library.

Design: The research questions were directed on the areas of expertise and skills, the didactical methods, the effects of the courses and the standards to measure these effects.

Results: The studies were all focused on general palliatieve care. Out of 27 studies 21 reported positive effects for communication, attitude, empathy and pain. Six of these 21 positive trails were studies with good quality designs whereas 15 had moderate designs. The 6 studies with a lack of effects was 1 study with good quality and 5 studies with moderate quality designs. The effects on patients were described in only a few cases. There was still frequent use of self-constructed rating scales, where data about validity and reliability were lacking or where these aspects were not studied.

Conclusions: The most successful were integrated courses focused on several themes with a variety of didactical methods.

INTRODUCTION

Many palliative care courses for nurses are organized that vary greatly in duration and design. Little is known about the effects of such courses. The present literature review describes the literature that concerns the effects of courses in palliative care at the undergraduate and postgraduate levels.

Palliative care is an important theme in nursing. This type of care provision is characterized by a generalist approach; in addition, various levels of specialization can be distinguished. At all levels of nursing education it is important for nurses or student nurses to be adequately trained. Patients have a great need for appropriate emotional support from nurses while maintaining the best possible quality of life during the palliative phase (Johnston & Smith, 2006). The focus during this phase is on management of pain and other symptoms, obtaining sufficient information about treatment, prognosis, care delivery and coping strategies, achieving a sense of control, avoiding an extended dying process and maintaining important relationships (Heaven & Maguire, 1996; Meredith et al., 1996; Kutner et al., 1999; Singer et al., 1999; Steinhauser et al., 2000; Zwaard et al., 2003; Carter et al., 2004).

Nurses and student nurses experience this as a difficult aspect of care provision and indicate that they do not feel adequately prepared regarding a number of sub-aspects, especially in the areas of pain and symptom management, stress management, ethical issues and communication (Corner & Wilson-Barnett, 1992; Sellick et al., 1996). Even after acquiring some practical experience, student nurses still find it difficult to care for palliative patients (Copp, 1994).

Palliative patients are cared for not only on specialized units, but also at home or on general wards of hospitals and nursing homes. As a result, it is not only advanced nurses who come into contact with the palliative patients; student nurses and recent nursing graduates must also be able to provide adequate care to them. Competencies with respect to palliative care provision are therefore formulated at various levels (De Vlieger et al., 2004). The first level is the basic level, intended for undergraduate nurses and qualified healthcare professionals working in a general healthcare setting. The advanced level concerns qualified healthcare professionals who either work in specialist palliative care or a general setting where they fulfill the role of resource person. Finally the specialist level is intended for qualified healthcare professionals who are responsible for palliative care units, who offer a consultancy service and actively contribute to palliative education and research. Because multiple disciplines are involved in palliative care, both monodisciplinary and multidisciplinary courses are relevant.

The current literature review is focused on monodisciplinary and multidisciplinary educational programs at basic and advanced levels.

AREAS OF COMPETENCY

Courses in palliative care for student nurses vary greatly in terms of duration, form and content. At the undergraduate level, palliative care courses are often integrated into the curriculum; in a few cases, separate modules (or optional modules) can be distinguished (Arber, 2001), which can sometimes be taken together with students from other disciplines (Latimer et al., 1999). At this level, only a limited number of hours are usually available for palliative care (Lloyd-Williams & Field, 2002). As part of continuing education (CE), courses are offered to registered nurses that are intended both for nurses with little experience in palliative care and nurses who have worked for a number of years on more specialized wards.

In palliative care, a number of educational themes – based on the needs of patients and nurses – are considered to be important:
- communication and psycho-social support
- attitude with respect to death and dying
- empathy
- pain and symptom management

Although communication, death attitude and empathy are closely related we made a difference in the description of these themes when we could find these aspects separately in the literature. These themes are offered individually or are combined as part of a longer curriculum. Empathy is considered as a crucial aspect of the communication process with various dimensions: the empathetic sensitivity of the care provider, empathy expressed by the care provider and the reaction of the patient (La Monica, 1981).

Other, topics such as the organization of care and functioning of the team are rarely offered and seldom described in a separate educational program. The present literature review will therefore be limited to the effects related to the themes listed above.

The review questions for this study are as follows.
- What areas of expertise and skill are addressed in palliative care courses for nurses at the undergraduate and postgraduate levels, and which didactical methods are used?
- Which outcome measures are uses to measure these courses?
- What are the effects of education in palliative care at the undergraduate and postgraduate levels for nurses, student nurses and patients?

METHOD

Search strategy

A search was made for literature from the period between 1990 and 2005 using CINAHL, Pubmed and Psychlit, supplemented with a search for relevant systematic reviews from the Cochrane Library.

Relevant search terms for this search were based on an initial search of the literature, exploring relevant hits and keywords used in articles relevant to our research questions for the review. The systematic search employed the free-text terms 'nursing education' OR 'death education' OR 'undergraduate courses' OR 'postgraduate courses' in combination with (AND) 'palliative care' OR 'cancer pain' OR 'communication skills' OR empathy. In addition, searches with equivalent MeSH-terms for all databases were performed.

As a supplementary search strategy references from the articles used in the initial search were screened using the same criteria.

Selection of articles

Types of studies
The studies employed a comparative design, to include all randomized controlled trials, non-randomized prospective trials, single group pre-test post-test designs and post-test comparisons for intervention and control groups;

Types of participants
Student nurses and nurses who were actually involved in palliative care for patients, or a multidisciplinary group of professionals including these nurses (at least one third of the group);

Types of intervention
The studies concerned undergraduate and postgraduate (CE) courses, which address communication training, attitude towards death, empathy, pain or a combination of these themes;

Types of outcome measures
The studies reported on outcomes in patients, nurses or student nurses. Outcomes were changes in knowledge, behavior or skills, attitude, empathy and pain rating. Measurements of effects on patients were included only if cancer patients or palliative patients were involved.

Analysis
Two reviewers (the authors) independently applied inclusion criteria to each study to be found. Ratings were established by consensus of the assessors.

The assessors used a rating system to rate the level of quality of the study (see table 1).

Table 1:   Methodological quality rating (modification of Anderson & Sharpe, 1991)

1.   Randomization described: experimental/quasi-experimental
2.   Similarity at baseline
3.   Interventions (course content) described
4.   Drop-out rate described and acceptable
5.   Follow-up measurement described
6.   Sample size for each group described and acceptable
7.   Validity and reliability of used instruments
8.   Rater procedure described (r>0.80)
9.   Specification and use of blinding for interaction analysis

When a study had a rating of 2 points or less it has been removed; when a study scored 3 points with a negative score for the validity and reliability of the used instruments it has been removed either.

Studies which scored positive on at least seven of the criteria were graded as high quality studies, whereas studies which met between 3 and 6 criteria scored as studies of moderate quality (see table 2).

Table 2:   Level of evidence in combination with results

Study quality	Studies with positive effects on patients and nurses		Studies without positive effects on patients and nurses	
	High quality	Moderate quality	High quality	Moderate quality
Course content				
Communication	De Lucio et al. (2000) Delvaux et al. (2004)	Wilkinson et al. (1998, 1999) Wilkinson et al. (2002) Wilkinson et al. (2003) Maguire et al. (1996)		Booth et al. (1996) Heaven & Maguire (1996, 1997)
Attitude	Delvaux et al. (2004) Razavi et al.(1991)	Frommelt (2003) Mallory (2003)	Razavi et al. (1993)	Hainsworth (1996) Wessel & Rutledge (2005)
Empathy	Razavi et al. (2002)	Yates et al. (1998)		
Pain	Francke et al. (1997)	Ferrell (1993) Wilkes et al. (2003) Dalton et al. (1996)		Camp-Sorrell & O'Sullivan (1991)
Combined courses		Linder et al. (1999) Arber (2001) Boxell et al. (2003) Adriaansen et al. (2005) Ersek et al. (2005) Kwekkeboom et al. (2005)		

High quality: score>6
Moderate quality: score 3-6

FINDINGS

The literature search resulted in 453 articles, of which 25 evaluations of palliative care courses were usable according to the above inclusion criteria. With 7 courses resulting from supplementary search strategies, a total of 31 palliative care courses were found which are described in 32 articles. After rating 27 studies remained. Table 3 gives an overview of the 27 studies, indicating that most studies addressed postgraduate courses for nurses, whereas all studies measured effects on nurses and a few studies had a multidisciplinary character.

Table 3:   Overview of studies on the effects of palliative care courses
             (n=27)

Course content	Target group		Disciplines within target group		Outcomes studied	
	Under graduate	Post-graduate	Nursing	Multi-disciplinary	Effects on professionals	Effects on patients
Communication		8	6	2	8	4
Death attitude	2	5	6	1	7	1
Empathy	-	2	2	-	2	1
Pain/symptom management	-	5	5	-	5	1
Combined courses	2	3	5	-	5	-
Total	4	23	24	3	27	7

Content of palliative care course

Content 1: communication and attitude - The communication training courses we found (n=8, scheme 1) generally used skill-training methods with role playing and focused feedback. Feedback resulted from material submitted by the course participants (audio tapes or video tapes) based on discussions with actual or simulated patients (Heaven & Maguire, 1996; Booth et al., 1996; Wilkinson et al., 1998, 2002, 2003) in addition to more instruction-oriented methods, video demonstrations were also used (Wessel & Rutledge, 2005). The same course was sometimes described in several studies (Wilkinson et al., 1998, 1999).

Communication training courses often also focused on recognizing and reducing the psycho-social problems of patients. In their evaluation, the studies describe these problems with terms such as "patient concerns" (Heaven & Maguire, 1997) and reduction of "distress" (Reid-Ponte, 1992).

Sometimes specific interventions were taught, such as relaxation training and cognitive restructuring (Garcia de Lucio et al., 2000).

A number of communication courses paid explicit attention to the student's attitude with respect to death and dying (Wilkinson et al., 1998, 1999, Frommelt,

2003), although no instruments were used to assess the improvement of these attitudes. These studies worked from the assumption that increased expertise and communication skills are automatically related to the development of a more positive attitude towards the care of cancer patients and palliative patients.

We found seven courses that emphasized and measured death attitude (scheme 2), of which four courses also paid attention to communication (Razavi et al., 1988, 1991,1993; Mallory, 2003; Delvaux et al., 2004; Wessel & Rutledge, 2005). Two of the attitude training courses were intended for undergraduate students, while the others were postgraduate courses. Although several courses were offered in a compact form (a contiguous three-day or five-day program), the majority were composed of weekly training sessions during a period lasting three weeks to six months.

Attention was paid, besides death attitude to knowledge, skills and intervention methods (cognitive restructuring and relaxation). The courses that primarily concerned attitude training varied in length from 6 to 105 hours; in the latter case, empathy development and theoretical themes were integrated.

Content 2: empathy - In the courses we found (n=2, scheme 3) empathy development was an important aspect of more comprehensive postgraduate course in palliative care and was measured separately. Empathy was taught in communication programs and courses where the student learned specific Counselling skills. In the CE programs the length of the empathy training varied between 13 hours and 12 days. Techniques such as role playing and case presentation were often used, and the tutor behaved as a role model.

Content 3: pain and symptom management - Courses that focused on pain and symptom management (n=5; scheme 4) commonly addressed pain assessment and documentation and the use of pharmacological and non-pharmacological interventions. Nurses often state that pain and symptom management is an area where continuing education is required (Fothergill-Bourbonnais & Wilson-Barnett, 1992). Longer courses (five to six days) comprised activities focusing on increasing participants expertise, pain intervention and reporting and communication of symptoms. Sometimes the courses included a practical component (Ferrell, 1993; Dalton et al., 1996).

Content 4: combined courses - The combined courses we found (n=5, scheme 5) focused on multiple themes such as the principles of palliative care, communication, pain and symptom management, spirituality, ethical issues and cultural dimensions (Arber, 2001; Adriaansen & Frederiks, 2002; Ersek et al., 2005). Moreover, attention was paid to attitudes towards death and dying. In one course a theme regarding the cognitively impaired was included (Ersek et al., 2005). During these types of courses, a diversity of didactical methods were used

(discussions, assessments, lectures, pain instruction, attitude training, supervision). One of the courses used video conferencing as an alternative to classroom education (Van Boxell et al., 2003). The duration of the combined courses that were found varied from 32 to 50 hours; one course included a hospice placement (Arber, 2001), one course consisted of an extensive companionship program with only a few theoretical hours according to the principles of the experiential learning theory (Kwekkeboom et al., 2005). Sometimes a course contained a number of supervision sessions which focused on implementing the learned material (Adriaansen & Frederiks, 2002).

OUTCOME MEASUREMENT IN THE EVALUATION OF PALLIATIVE CARE COURSES

Outcome measurement 1: communication and attitude - Both simulated and real patients were involved in the effect measurements of communication training courses.

In two effect studies (Heaven & Maguire, 1996, 1997; Garcia de Lucio et al., 2000), the validated State Trait Anxiety Inventory (STAI) was used to evaluate the effects on course participants, while in another study the modified Collett and Lester Fear of Death Scale was used (Wilkinson et al., 1998). Heaven & Maguire (1996, 1997), Wilkinson (1991) and Wilkinson et al. (1998, 1999) validated and revised their measurement instrument as part of various studies. Regarding the measurements of nurses' attitudes, three studies used the validated Frommelt Attitude Toward Care of the Dying Scale (FATCOD) (Frommelt, 2003; Mallory, 2003; Wessel & Rutledge, 2005). In two other studies the researchers used the validated Semantic Differential Attitude Questionnaire (SDAQ) (Razavi et al., 1991, 1993) and the validated Cancer Research Campaign Workshop Evaluation Manual (CRCWEM) (Delvaux et al., 2004; Razavi et al., 1993). In one study the Attitudes, Subjective Norms and Behavioral Intentions of Nurses Toward Care of Dying Persons and Their Families (ASBID) was used (Hainsworth, 1996). Wessel & Rutledge (2005) used the Death Attitude Profile-Revised (DAP-R). Razavi et al. (1993) and Delvaux et al. (2004) used the Nursing Stress Scale (NSS) to measure the occupational stress. Kwekkeboom et al. (2005) used the Attitudes About Care at the End of Life scale (AACEL) whereas concerns about caring were assessesed with a self constructed 6-items list.

The effects on patients were measured using the Hospital Anxiety and Depression Scale (HADS) and the Spielberger State Anxiety Questionnaire (SSAQ) (Heaven & Maguire, 1996, 1997) and focused on satisfaction scores: Patient Satisfaction with the Interview Assessment Questionnaire (PSIAQ) (Delvaux et al., 2004). However, self-constructed rating scales were also used frequently, where the validity and reliability of such scales was not reported.

Outcome measurement 2: empathy - Various measurement instruments were used to measure the empathy of nurses; this depended partly on the stage of empathy that the researchers wanted to measure (Layton & Wykle, 1990; Yates et al., 1998) and on whether the researcher wanted to study the effects on patients. Specifically with respect to empathy involving cancer patients and/or palliative patients, a single measurement instrument (expressed sympathy) was used the Staff-Patient Interaction Scale for Palliative Nursing (SPIRS-PCN), validated by Yates et al. (1998).

Effects on patients were measured using the amount of emotional words, using the Harvard Third Psychosocial Dictionary (HTPD) and the Martindale Regressive Imagery Dictionary (MRID), instruments with adequate validity and known reliability (Razavi et al., 2002). Regarding the European Organization for Research and Treatment of Cancer- Quality of Life Questionnaire (EORTC-QIQ-C30), which measures the quality of life of cancer patients, data about validity and reliability are also acknowledged (Razavi et al., 2002).

Outcome measure 3: pain and symptom management - The effects of courses focusing on pain and symptom management on nurses were measured using knowledge and attitude tests. The effects on patients were measured by studying patient records. In two studies, the modified and validated McGill Pain questionnaire was used for the patients (Ferrell, 1993; Francke et al., 1997). In one other study the Modified Nurses Knowledge and Attitudes Survey was used, of which data about validity are also known as well as a subjective questionnaire to collect information on pain management knowledge (Ferrell, 1993). In his study, Wilkes et al. (2003) also described the reliability and validity of the knowledge test that was used. The other studies used to some extent self-constructed scales or self-reported questionnaires, with limited of unknown validity and reliability (Ferrell, 1993; Dalton et al., 1996).

Outcome measurement 4: combined courses - Combined courses generally ended with a knowledge test (Arber, 2001; Van Boxell et al., 2003; Adriaansen et al., 2005; Ersek et al., 2005; Kwekkeboom et al., 2005). For two courses, the validated Palliative Care Quiz for Nurses (PCQN) (Ross et al., 1996), or a variant thereof (Adriaansen & Van Achterberg, 2003), was used. In two other courses a self-constructed rating scale was used, where no data on validity and reliability were available. One of these scales concerned attitude change. In one course evaluation scores of the supervisors were collected (Ersek et al., 2005). Finally, one course used a self-efficacy scale with moderate validity, the Self-Efficacy for Palliative care scale (SEP)(Adriaansen et al., 2005).

EFFECTS OF PALLIATIVE CARE COURSES

Effects of communication and attitude courses - The relevant studies reported improvement in assessment, in the use of open questions, in general communication and in the use of emotionally-loaded words. However, little improvement was found in the identification of patient concerns. Effects with respect to the anxiety level of nurses varied from no effect (Garcia de Lucio et al., 2000; Wessel & Rudledge, 2005) to a reduction of the stress level (Razavi et al., 1993; Delvaux et al., 2004; Kwekkeboom et al., 2005). The study of Wilkinson (1999) showed a maintenance of the improvement in performance after 5 years. However, one study reported a short-term training effect on death attitudes and limited changes regarding post-training communication skills (Razavi et al., 1993). Hainsworth (1996) did not find any effects after a death education course.

When effects on patients were measured, the researchers found that the majority of the patient concerns were not detected and that there was a correlation between patient disclosure and increased blocking behavior from the nurses. According to Wilkinson (1991), high anxiety levels with respect to one's own death were related to more blocking behavior in patients. When the training focused only on the nurse's skills without paying attention to attitude, this led to more blocking behavior (Booth et al., 1996). Heaven & Maguire (1997) reported that only 42% of the patient concerns were identified by the nurse. Sometimes nurses reported concerns that were not acknowledged by the patient. However, the patients appeared to be selective in their disclosure and were not always prepared to share their concerns with the nurse, especially if the nurses focused primarily on somatic problems.

A direct link was found between the increased use of emotionally loaded words by nurses and the emotionally loaded words expressed by patients (Razavi et al., 2002). The effects of a three-day course were not less than those of a five-day course, and the effects of both of the above courses were less than an integrated course with the same content (Maguire et al., 1996).

Generally speaking, positive effects were found on the communication skills of nurses, but this did not lead to improvement at the patient level. With courses that focus specifically on attitude development, positive effects on nurses were found in nearly all cases (Razavi et al., 1988, 1991, 1993; Frommelt, 2003; Mallory, 2003; Delvaux et al., 2004), although one study showed a significant reduction of the positive effect assessed just six months after the training (Razavi et al., 1991).

Effects of courses on empathy - Regarding courses focusing on empathy, the results are difficult to compare, because different effect measurements were used in the various studies. In three of the four courses in the present study, there was a significant increase in empathy scores; positive effects were measured by the increased use of emotionally loaded words by patients and nurses (Razavi et al., 2002) or the improved scores on a specific empathy instrument (Yates et al., 1998).

Effects of courses on pain and symptom management - The studies we found measured the effects of pain and symptom management courses and pain documentation courses on nurses and patients. The results of these types of training were not unequivocal. One study showed that pain documentation had no effect immediately after a short course (Camp-Sorrell & O'Sullivan, 1991), another showed an increase in documentation of relevant issues after six months (Dalton et al., 1996). Ferrell et al. (1993) and Wilkes et al. (2003) reported an improvement (sometimes permanent) in the nurses' expertise, while Dalton et al. (1996) found no change in knowledge.

Regarding the effects of such training on patients, in one study patients reported a lower pain intensity (Francke et al., 1997). However, no improvement in communication was ascertained although the quality of the pain assessment did improve.

Wilkes et al. (2003) concluded that the effects for first year students were equally to those for advanced students. Pain management training could therefore begin early in the study program.

Effects of combined courses - The effects of combined courses were described primarily at the postgraduate level and to a lesser extent at the undergraduate level. This is most likely because education in palliative care at the undergraduate level was usually offered in an integrated form and its effects were not measured separately (Wass, 2004). All five studies included in the present review reported a significant increase in knowledge measured immediately after the course. Moreover, Adriaansen et al. (2005) reported that the course participants displayed increased self-efficacy. Effects on patients were not measured in the combined courses.

Three studies measured the effects of specific didactical methods. They found that the magnitude of the course (Maguire et al., 1996) and the teaching method (Van Boxell et al., 2003) did not make any difference in the effects on nurses or patients. This conclusion links up with that of Waddell (1991) in a meta-analysis of the effects of continuing education, who also found no correlation between teaching methods and the degree with which behavior was changed in practice. Although the literature on this topic emphasizes that very short courses do not lead to measurable effects it cannot be concluded that longer courses have a stronger effect. A brief course that pays attention to implementation of the material learned can be effective (Francke et al., 1997) if it focuses specifically on a defined aspect of palliative care. External factors were included in only two studies (Booth et al., 1996; Francke et al., 1997), the opinion of the supervisor regarding the acquired skills of the student is described in one course (Ersek et al., 2005)

Scheme 1: Communication

Author	Sample size	Design	Content	Effects on nurses	Effects on patients	Data collection	Scale	Validity & Reliability of scales
Heaven & Maguire (1996, 1997)	N=33 hospice nurses (trained and untrained staff): pretest/post-test N=22 nurses follow-up N=87 patients	Pretest-posttest with follow-up and control; conven-ience sample	2 group sessions (8-12), 4 small group sessions (3-4) (during 10 weeks) with video demonstrations and feedback on practice tapes	Little effect on nurses' ability to identify patients' concerns	60% of patient concerns not elicited	Interview Questionnaire Audio taped assessment interview with patient	HADS (patients) SSAQ Self constructed Concerns Checklist	V + R + V: + R: + V: ? R: +
Wilkinson et al. (1998, 1999)	N=110 registered nurses: Pretest/post-test N=33 nurses follow-up	Pretest-midtest-posttest with follow-up after 2.5 years; conven-ience sample	26 h integrated in the program during 6 months; 3 modules: knowledge, skills, attitudes toward death; feedback on audiotaped recordings; experimental workshops covering ways of handling difficult situations	Midtest and posttest: significant improvement in every area of assessment; follow-up: maintenance of posttest scores, improvement in psychological assessment; LFDS: pretest moderate scores	95% of patients are satisfied with interaction -	Audio taped assessment interview with patient	Revised version of Communica-tion Skills Rating Scale (Wilkinson, 1991); Modified Collett and Lester Fear of Death Scale (one factorial)	V: + R: + V: + R: +

Author	Sample size	Design	Content	Effects on nurses	Effects on patients	Data collection	Scale	Validity & Reliability of scales
Booth et al. (1996)	N=33 hospice nurses	Pretest-post-test with follow-up and control group; convenience sample	6 training sessions (knowledge and skills, no attitude training) focusing on assessment skills during 2 months	Slight increase in blocking behavior; weak improvement in open direct questions; significant improvement in open-directive questions. The more nurses feel supported the less blocking behavior	The more disclosure the more blocking behavior	Questionnaire Interview Questionnaire Audiotaped assessment interview	Self constructed questionnaire to indicate importance and perception of interviewing skills; Semi-structured interview focused on their support; Revised version of House & Wells support scale; Communication Skills Rating Scale	V: - R: - V: - R: - V: ? R: ? V: - R: -
Maguire et al. (1996)	N=169 health professionals (doctors, nurses, social workers)	Pretest-posttest with follow-up	3 (n=105) or 5 (n=64) days workshops in groups of 10 persons	Significant improvements in four of six behaviors; improvements in eliciting key problems; decline in skills at follow-up; no difference in outcomes between 3 and 5 days workshops	-	Audio taped assessment interview, Observation of simulated patient contact	Self constructed rating scale (see Booth); Self-constructed observation instrument	V: + R: + V: - R: -

Author	Sample size	Design	Content	Effects on nurses	Effects on patients	Data collection	Scale	Validity & Reliability of scales
De Lucio (2000)	N=61 general hospital nurses (29 experimental, 32 control)	Pretest – post-test with control group; random-ized at group level	25 hours training (5 weekly sessions) in relaxation, cognitive restructuring and communication: instruction, modeling with feedback	No change in state-anxiety levels, no difference between groups; Significant improvement in most of the communication areas	-	Questionnaire Interviews with simulated relatives of seriously ill patients	STAI Self-constructed observational scale	V: + R: + V: + R: +
Wilkinson et al. (2002)	N=308 cancer/pallia-tive care nurses (RN)	One group Pre-test-posttest; conven-ience sample	26 hours of training during 6 months (knowledge, skills and attitude). Role play, audiotape feedback, demonstration video	Significant improvement in emotionally-loaded areas of communication	-	Audio taped nursing assessments with patients; Written self critique of audiotape	Modified Communica-tion Skills Rating Scale (Wilkinson, 1991)	V: + R: +
Wilkinson et al .(2003)	N=108 cancer/pallia-tive care nurses	One group pre-test-posttest; conven-ience sample	A condensed three day workshop (see Wilkinson 2002)	Significant improvements on eight of the nine individual communication areas; Significant improvement in subjective levels of confidence	-	Audio taped nursing assessments with patients	Modified Communica-tion Skills Rating Scale (Wilkinson, 1991)	V : + R : +

Author	Sample size	Design	Content	Effects on nurses	Effects on patients	Data collection	Scale	Validity & Reliability of scales
Delvaux et al. (2004)	N=115 oncology nurses (57 experimental, 58 control)	Pretest-posttest with control group with follow-up; random-ized at individual level	105 hours psychological training (30h theoretical information, 75h role playing exercises and experiential exchanges (see Razavi)	Significant increase in facilitate behaviors in interviews with simulated patients; less positive effects regarding interviews with cancer patients; No effect on nurses' satisfaction level	Positive effect on patients' satisfaction	One simulated interview (before and after course) One actual patient interview (3 months after course)	CRCWEM PSIAQ	V: + R: + V: ? R: +

Scheme 2: Attitude

Author	Sample size	Design	Content	Effects on health care workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Razavi et al. (1988, 1991)	N=78 health professionals (78 experimental, 42 control); multicenter study	Pretest-posttest with control group and follow-up; conven-ience sample	12 hours of training: attitudes, communication psychological distress, strategies for handling difficult situations and stress and survival in cancer nursing settings	Significant attitude change especially for subjects with negative attitudes; Significant reduction of the positive effect assessed just after the training	-	Attitude measurement via questionnaire	SDAQ	V : + R : +
Razavi et al. (1993)	N=72 oncology nurses (36 experimental, 36 control); multicenter study	Pretest-posttest with follow-up; (cross over study); random-ized at group level	24 hours of psychological training (8 weekly sessions of 3 h.)	Significant attitude change (self concept); no changes noticeable after two months; Significant effect on level of occupational stress (inadequate preparation); Limited changes regarding communication skills	-	Attitude measurement via questionnaire Occupational stress via questionnaire Interviews with simulated patients (2 months after course)	SDAQ NSS CRCWEM	V: + R: + V: + R: + V + R: +
Hainsworth (1996)	N= 28 RNs of a teaching hospital (14 experimental, 14 control)	Pretest-posttest with control group; conven-ience sample	Three 2 hour classes based on nurses' stressors; discussion, videos, music, role playing	No effects on the attitudes or behavioral intentions toward care of dying patients and their families	-	Attitude measurement via questionnaire	ASBID	V: ? R: ?

Author	Sample size	Design	Content	Effects on health care workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Frommelt (2003)	N= 115 junior undergradu-ate nursing students (49 experimental, 66 control)	Pretest-posttest with control group; conven-ience sample	45 hours of attitude training over 15 weeks: toward caring for terminally ill persons: role play	Significant positive change in experimental group	-	Attitude measurement via questionnaire	FATCOD	V: + R: +
Mallory (2003)	N= 104 junior undergradu-ate nursing students (45 experimental; 59 control)	Pretest-posttest with control group; random-ized at group level	Use of ELNEC course (End of Life Nursing Education Consortium) package: role play, group process, patient interaction along with experiences in a hospice. (6 weeks)	Significant difference between pre- en posttest score in the intervention group; no change in the control group; follow-up no significant difference with post-test scores	-	Attitude measurement via questionnaire	FATCOD	V: + R: +
Delvaux et al. (2004)	N=115 oncology nurses (57 experimental, 58 control); multicenter study	Pretest-posttest with control group with follow-up; random-ized at individual level	105 hours psychological training (30h theoretical information, 75h role playing exercises and experiential exchanges (see Razavi)	Positive changes on stress level, attitudes towards cancer and death, communication skills; No effects on nurses' satisfaction levels; Less positive effects regarding interviews with an actual patient	A direct positive effect on patients' satisfac-tion level with skills of the nurse	Interviews with simulated patients (before and after course) and with real patients (3 months after course)	NSS; SDAQ CRCWEM EROTC QIQ-C30 (patients)	V: + R: + V: + R: + V + R: + V: + R: +

Author	Sample size	Design	Content	Effects on health care workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Wessel & Rutledge (2005)	N=33 home care and hospice nurses	Pretest-posttest; convenience sample	Palliative care course during 6 months including goals of end-of-life-care, pain control, symptom management, communication, issues of spirituality, grief and bereavement	Improvement of some attitudes towards death (death avoidance), no significant changes in attitudes toward care for dying patients; decrease in death anxiety	-	Attitude measurement via questionnaires	FATCOD DAP-R	V: + R: + V: + R: +

Scheme 3: Empathy

Author	Sample size	Design	Content	Effects on health care workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Yates et al. (1998)	N=181 palliative care nurses	Quasi – experimental design (measurement before and after the course); randomization at individual level	Professional development program of 14 weekly group sessions of 90 minutes (learning group with/without peer consultation)	Significant increase in empathy scores	-	Pre-post surveys	SPIRS-PCN	V: + R: +
Razavi et al. (2002)	N=115 oncology nurses; 6 experimental groups, 6 control; (multicenter study)	Pretest-posttest with control; randomization at individual level	105 hours psychological training (3 weeks): 30 hours theoretical information (psychological dimensions of oncology), 75 hours role playing exercises and experiential exchanges and case presentations	Significant increase in use of emotionally loaded words (quantitatively and qualitatively)	Increased use of emotional words; high number of different emotional words expressed	20-min video-taped/audio taped interviews with simulated patients (before and after course) and with real patients (3 months after course)	HTPD M R ID CRCWEM (patients) EORTC-QIQ-C30 (patients)	V: + R: + V: + R: + V: + R: + V: + R: +

Scheme 4: Pain and symptom management

Author	Sample size	Design	Content	Effects on health care workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Camp-Sorrell & O'Sullivan (1991)	N=44 oncology nurses; (16 experimental, 14 control, 18 no intervention)	Pretest-posttest with experimental group, control group with limited intervention, group without intervention; randomization on ward level	Continuing education 45 minutes: pain instruction with of without the McGill Pain Questionnaire, practical exercise, feedback on documentation	No effects on nurses' pain documentation	-	Patient record study of pain documentation	Self-constructed scheme	V: + R: ?
Ferrell (1993)	N=26 cancer nurses	One group pretest-posttest; convenience sample	40 hours didactic and clinical training (5 days): lectures about pain assessment, pharmacology, (non)drug interventions	Significant improvement in nurses' knowledge and attitudes concerning pain; Improvement in teaching patients and colleagues	-	Questionnaire / Questionnaire	Modified Nurses Knowledge and Attitudes Survey / Self-constructed evaluation survey	V: + R: + / V: - R: -
Dalton et al. (1996)	N=29 public health nurses and hospice nurses; 209 patient charts / 163 patient charts	Quasi-experimental time series design	Educational program of 6 days during 6 weeks (discussions, assessments, participation in hospital rounds)	No significant change in attitudes and skills; Some increase in pain documentation	-	Patient record study of pain documentation	Self-reported questionnaire: survey of Expectations and Pain Assessment Questionnaire; Cancer Pain Knowledge Inventory	V: ± R: ± / V: ? R: ?

Author	Sample size	Design	Content	Effects on health care workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Francke et al. (1997)	N=106 surgical cancer nurses (multicenter); N=152 breast cancer and colon cancer patients	Pretest-post-test controlled intervention study RCT; random-ization on ward level	8 Weekly sessions of three hours; follow-up meeting after 4 months.	An increase in the quality of activities relevant to taking pain histories; No increase in the use of pain rating scales; limited impact on physician's pain policy	Lower pain intensity; no effects on pain duration, sleepless hours, state anxiety, mood disturban-ces, duration of hospitaliza-tion	Questionnaire	Pain Assessment Questionnaire (partly based on the McGill Pain Questionnaire); Dalton Pain Questionnaire	V: + R: + V: + R: +
Wilkes et al. (2003)	N=92 graduate nursing students (3 schools)	Quasi-experimen-tal pretest-posttest and follow-up	7 seminars (2-4 hours) in a case-based interactive format in pharmacology, adult health, primary care or anesthesia courses	Significant improvement of pain knowledge with retention after 6 and 24 months	-	Paper-and-pencil test	Self constructed: 13 pain knowledge and application questions	V: + R: +

Scheme 5: Combined courses

Author	Sample size	Design	Content	Effects on healthcare workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Linder et al. (1999)	N=135 healthcare professionals working in 8 hospitals (doctors, nurses, social workers)	One group pretest-posttest; random-ized design	Modules concerning pain management, ethical and spiritual elements, interdisciplinary work, values and beliefs related to death and dying	Significant changes on the attitudes scale and the knowledge scale	-	Questionnaire	Self-constructed Palliative Care Questionnaire: 'Attitudes toward hospice care' scale Knowledge of pain management and symptom control" scale	V: - R: -
Arber (2001)	N=33 third year bachelor student nurses	One group pretest-posttest; conven-ience sample	Palliative module: 50 hours of teaching: principles, pain and symptom management, communication, ethical and legal issues and facing death; 1-week hospice placement	Significant increase in knowledge (symptom control and opioid use)	-	Paper and pencil test	PCQN	V:+ R:+
Boxtel et al. (2003)	N=28 community nurses (13 face-to-face; 15 video conference)	Pretest-posttest; randomized crossover design	Four workshops face-to-face or via video conference: pain and symptom management, loss and bereavement, attitude	Significant increase in knowledge (both types of education); student more satisfied with face-to-face delivery	-	Paper and pencil test	Self-developed knowledge test	V: - R: -

Author	Sample size	Design	Content	Effects on healthcare workers/nurses	Effects on patients	Data collection	Scale	Validity & reliability of scales
Adriaan-sen et al. (2005)	N= 66 NP and LPN (33 experimental, 33 control)	Pretest-post-test with control Conven-ience sample	Post qualification course of 32 hours of teaching: pain and symptom management, communication, attitude and 4 supervision sessions	Significant increase in knowledge and insight, improvement on the SEP	-	Paper and pencil test / Questionnaire	Comprehensive-PCQN; / SEP	V : + / R : + / V : ± / R : +
Ersek et al. (2005)	N=169 (61 NA and 108 LPN)	Pretest-post-test; quasi-experimen-tal design; Conven-ience sample	Four daylong monthly classes: PERT program curriculum	Significant improvement in knowledge, self-evaluation scores and supervisors' scores	-	Knowledge test / Self-rating instrument / Self-rating instrument	Self-developed EOL knowledge test / Self-developed evaluation / Self-developed supervisor evaluation	V : + / R: + / V : ± / R: ± / V : ± / R: ±

DISCUSSION

Our literature review set out to address the content, outcome measurement and effects of courses for palliative care.

A first result from our study is that courses address a variety of topics in general care; we found only one description in the area of mental health (Ersek et al., 2005).

In courses with a longer duration a mix of didactical methods is used. The diversity of courses concerns not only the topics, but also the number of hours that are devoted to various themes.

In their meta-review, Thompsom O'Brien et al. (2004), found that a combination of methods in communication training for health care professionals was the most effective approach. Interactive workshops in continuing education of these professionals can have a positive effect on professional practice compared to short lesson cycles. Supervised reflection was used as part of communication courses or combined courses, for example, in the studies conducted by Wilkinson et al. (1999) and Adriaansen & Frederiks (2002). Reflection can be considered as a method for the student to handle difficult situations on the ward which influence the communication process positively. Didactical methods may include distance learning that is considered to be as effective as face to face educational methods (Van Boxell et al., 2003).

One successful palliative care companion program provided students with the opportunity to come into close contact with patients. However a subsequent more comprehensive study revealed less positive results, possibly due to methodological problems (Kwekkeboom et al., 2006)

Although palliative care is multidisciplinary in nature, only a few of the 27 courses took a multidisciplinary approach. For that matter, in their meta-evaluation of the effects of palliative care courses, Zwarenstein et al. (2004) did not find any indications that an interdisciplinary approach would have more effect than mono-professional training.

With respect to the measurement instruments used, it is essential that some validated and reliable interactional analysis systems were used multiple times after they had been improved. However, there was still frequent use of self-constructed and subjective rating scales and self-report questionnaires, where data about validity and reliability were lacking or where these aspects were not studied.

The simulated patient interview appeared to be a valid assessment tool (Finley et al., 1995). Although they can adequately replace real patients as part of assessments, little is known about the ideal-typical characteristics required by role plays. Although simulated patients are widely used, the results may possibly be influenced by the length and structure of the role plays and the length of the interviews. An interview of four minutes is likely to give less results compared to an interview of twenty minutes. In this regard, Razavi et al. (2000) found that it is especially roles with a high emotional charge that lead to desired changes in

communication skills. It is not clear which is an adequate length of an interview with a (simulated) patient.

In total, a positive effect was found in six of the studies with a high quality and an improvement was also found in fifteen studies with moderate quality. One study with high quality reported negative results and five of the studies with moderate quality showed no improvement. The lack of improvement may be related to the short length of the course (Hainsworth, 1996; Camp-Sorrell & O'Sullivan, 1991), is attributed to a ceiling effect (Wessel & Rutledge, 2005) and is linked with patient effects (Booth et al., 1996; Heaven & Maguire, 1997) (see Table 2). It remains unclear if the successful courses which do not report patient effects might have led to positive effects with patients and to what extent the observed behaviors of the health professionals relate to health outcomes. Regarding communication training, it can be concluded that skill training alone, without attention to the attitude on death and dying, does not lead to less blocking behavior if there is increased disclosure from the patients (Heaven & Maguire, 1996; Booth et al., 1996).

Improved effectiveness in eliciting feelings did not go together with more empathy (Maguire et al., 1996). Two studies showed a lack of consolidation of the positive results (Razavi et al., 1991; Maguire et al., 1996). A follow-up training might be essential to maintain and improve the effects (Razavi et al., 2003).

Only in one communication course, increased patient satisfaction was reported (Wilkinson, 1999); however individual satisfaction highly depends on personal needs (Carlson et al., 2005) and patients tend to rate their satisfaction positively even in situations of poor assessment (Wilkinson et al., 2003). Feldman-Stewart et al. (2005) revealed that patients and care providers can have multiple communication goals which make a comparison of the effectiveness of the courses difficult.

Although palliative patients and their closest friends and family have a great need for relevant information (Kutner et al., 1999; Zwaard et al., 2003; Carter et al., 2004), this topic was not addressed in effect measurements in patients or simulated patients. Heaven et al. (2006) demonstrated the importance of transfer of communication skills training to practice by clinical supervision. Effects of reflection are not measured and are primarily described in qualitative terms in the literature (Platzer et al., 2000).

Courses that combine communication training and death education should be preferred because of the positive effects. The positive results in the studies conducted by Frommelt (2003) and Mallory (2003), which measured only on attitude formation, seem to contradict this statement but in these studies skill training was involved due to the use of role plays, but the effects of this training were not measured. The benefits of an integrated approach providing communication skills courses as part of a broader course programme on palliative care are confirmed in studies amongst physicians (Klein et al., 1999; Fallowfield et al., 2002; Jenkins & Fallowfield, 2002). An integrated course leads to better effects than a condensed course lasting several days (Wilkinson, 1999; Razavi et al.,

2002). This could apply primarily to post-registration courses. Arber (2001) argues in favor of separate palliative care modules in preregistration programmes because the theme would otherwise tend to disappear in the multiplicity of topics. The positive effects of training would be enhanced if the training was accompanied by an implementation component. Involvement of the supervisor of the student is a crucial factor. There is an apparent lack of palliative courses focused on patients with mental health problems.

Regarding the effects of a course, many of the study designs in our review had a limited level of evidence (only pretest and posttest with a convenience sample or lack of instruments with known validity and reliability) and a small number of involved respondents which made the conclusions less convincing. Factors others than the course itself could influence the effects of these studies which can not be studied in single group pre- and post-training studies (Wilkinson et al., 2003; Feldman-Stewart et al., 2005).

LIMITATIONS

In this systematic literature review, there is a possibility of publication bias because negative results may not have been published. We did not explore the 'grey literature' with respect to this feature. Furthermore, because the courses were so divergent in their structure and content, and the measurement instruments were applied selectively to specific components, it is difficult to compare the results of various studies. We only looked for courses that were offered to nurses or health professionals (including nurses). Studies concerning the effectiveness of courses in palliative care directed specifically at physicians were not included, although the results could possibly be applicable to courses for nurses.

Besides the formal course content, to attain desired changes in the nurse's behavior or positive effects on the patients, it is also important to create a supportive environment. Some of the factors in the surroundings that can be distinguished are the support given to the nurses by the supervisor, the work pressure on the ward and the attention given to implementing the material learned in the course (Fielding & Llewelyn, 1987; Wilkinson, 1991; Francke et al., 1995; Wilkinson, 1999; Adriaansen & Frederiks, 2002). These factors are hardly ever included in the effects of the studies (Razavi et al., 1993; Delvaux et al., 2004), and should receive more attention in future studies.

RECOMMENDATIONS

Palliative care courses support professional nursing practice and are likely to generate beneficial effects when they address general care as well as mental health care. Regarding the content of palliative education, it appears that the greatest effects on nurses are attained with a mix of didactical methods and a combination of multiple themes where, during a period of several weeks, these aspects are integrated with practical experiences that can be reflected upon. These effects are amplified if there is attention to implementation on the ward of that which was learned in the course; this implies that the supervisors of the course participants must also be involved in post-registration courses.

With respect to further research, we recommend that patients be involved more frequently in effect measurements and that external variables be included in the research. Moreover, the research should involve designs with control groups, and more use should be made of valid and reliable measurement instruments to allow stronger proof about the effects of the courses themselves.

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Chapter 3

The content and effects of palliative care

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ABSTRACT

Background: Although palliative care is multidisciplinary in nature, nurses play an essential role in terminal care. Because new nurses frequently lack the specific skills for palliative nursing care as well as the competence in interdisciplinary practice, there is a need for continuing education in palliative care. This article describes a postgraduate course in palliative care for nurses.

Method: A postgraduate course was developed based on the needs of palliative patients and the subjective and objective needs of nurses.

Findings: Four roles assumed by nurses in palliative care were identified: bureaucratic, bio-medical, social-therapeutic, and informal. The actual results of the course were influenced by the contextual aspects, which were determined by the nursing environment. Assignments were formulated according to the needs of the nursing unit, and a number of peer review meetings were organized.

Conclusion: Successful implementation of a postgraduate course in palliative care increases nurses' expertise and offers an opportunity for nurses to exchange experiences and search for solutions to problems together.

INTRODUCTION

After decades of focussing mainly on medical technology and possibilities of cure, today more attention is paid to the process of dying. Palliative care is multidisciplinary by nature. New nurses, frequently lack the specific requirements for palliative nursing care and competence in interdisciplinary practice. For these reasons, a course in palliative care for graduated nurses was developed. This article describes the content of that course and the conditions that should be observed for implementation of the course to be successful.

Palliative care can be defined as the continuous, active and integral care of patients and their families by an interdisciplinary team at the time when, in medical terms, cure can no longer be expected (WHO, 1990). The objective of palliative care is attaining the highest possible quality of life for both patient and family, where the patient is approached as an equal and responsible partner. Palliative care fulfills physical, psychological, social and spiritual needs. Palliative care begins when a patient is informed that cure is no longer possible and it implies that when treatment is given it is not aimed at cure but at relief and reduction of suffering. This article describes a postgraduate course in palliative care for nurses.

BACKGROUND

In the Netherlands, palliative care is provided in institutions such as hospitals, nursing homes and hospices as well as in home care. Nurses are the providers most frequently present and they play an essential role in multidisciplinary terminal care.

Steggerda (1997) found that cancer patients expect nurses to not only provide physical care, but also to assist with psychosocial problems. Patients appear to be realistic; they do not expect help for problems that can no longer be solved. Rather, patients expect nurses to assist them in finishing their lives. Nurses must give patients the opportunity to live actively to the end (Cannaerts et al., 1998). However, patients sometimes underestimate the ability of nurses to relieve problems like physical pain, general malaise and exhaustion (Heaven,1996). Nurses, on the other hand, focus their attention primarily on patients' quality of life. Persoon & Frederiks (1999) found district nurses felt inadequate in a number of areas concerning terminal care. The nurses believed they lacked state-of-the art-knowledge regarding chemotherapy, radiotherapy and pain medication assessment and they had questions regarding ethical issues or issues about dying in general.
Hunt (1991) distinguishes four strategies used by nurses in dealing with terminal patients. He describes these strategies as roles.

- *Bureaucratic/administrative role*. In this role, the nurse works to function within the rules defined by the institution that gives shape to the daily activities.
- *Biomedical role*. In this role, the nurse's focus is on illness, diagnosis, anamnesis and interventions with physical symptoms.
- *Social-therapeutic role*. In this role the nurse meets the emotional, social, spiritual and material needs of patients and their families. Meeting the support needs of team members is also important.
- *Informal role*. In this role the nurse attempts to reduce the formal rules as much as possible to allow the dying process to proceed as smoothly as possible.

These roles shift when providing palliative care, and nurses should be competent to assume the right role at the right time. An adequate course in palliative care therefore must include subject matter that takes into account the subjectively experienced and objectively measured shortfalls in knowledge, attitudes and skills. The course also must focus attention specifically on the implementation of the results. Moreover the course should address strategies and hindrances in implementation (Grol, 2001). In this case, implementation is directed at the following aims: the nurse will be able to apply what is learned in the course on the unit where they work and will be able to create suitable conditions for themselves (and if possible for her coworkers) to enable the implementation

Nurses might experience some hindrances such as:
- Other nurses not following course expectations.
- Ward routine differs from course content.
- Insufficient support from superiors.
- Other disciplines are insufficiently informed.

Having more than one nurse from a unit participate in the course enables the nurse to provide support for each other. Moreover, participant nurses should be encouraged to disseminate content to familiarize colleagues with specific content. In this way, nurses can be trained to adapt elements of the course to their specific unit.

Another important aspect for the course to be successful is self-efficacy. This concept implies the extent to which students hold themselves capable of doing things. This trust appears to be predictive of success (Bandura, 1997). Self efficacy of students can be improved by having role models and verbal reinforcement by others. During the course, these strategies are used to increase the participants' self-efficacy. To avoid the above pitfalls and stimulate positive factors, the course is focused specifically on the implementation of the results.

COURSE DESCRIPTION

The core course consists of two parts: 1)training days and 2)peer review under supervision of an lecturer. The course is intended to acquire adequate role behavior and is influenced by factors as group composition and group size. We believed it was important to have a group of students working in different institutions and a group size which makes it possible to focus on communication and attitude development. In addition, there are several factors on the ward which influence the successful implementation of the course (Figure 1).

Figure 1:   Conceptual model of factors that contribute to behavioral change

```
┌──────────────────────┐
│ -  group             │
│    composition       │
│ -  group size        │
│ -  dissemination of  │
│    the results       │
└──────────────────────┘
          ⇕

┌──────────────────┐      ┌────────────────────┐      ┌──────────────────┐
│ Supplementary    │      │ Peer review        │      │ Behavioral       │
│ training days    │ ⇒    │ focusing on        │ ⇒    │ Changes          │
│ Focus on         │      │ -  reflection      │      │                  │
│ adequate role    │      │ -  implementation  │      └──────────────────┘
│                  │      │ -  self-efficacy   │
└──────────────────┘      └────────────────────┘
          ⇕                        ⇕                           ⇕

┌───────────────────────────────────────────────────────────────────────┐
│                    Factors on the ward                                 │
│                    -  support                                          │
│                    -  ward routines                                    │
│                    -  other disciplines                                │
│                    -  continuity                                       │
└───────────────────────────────────────────────────────────────────────┘
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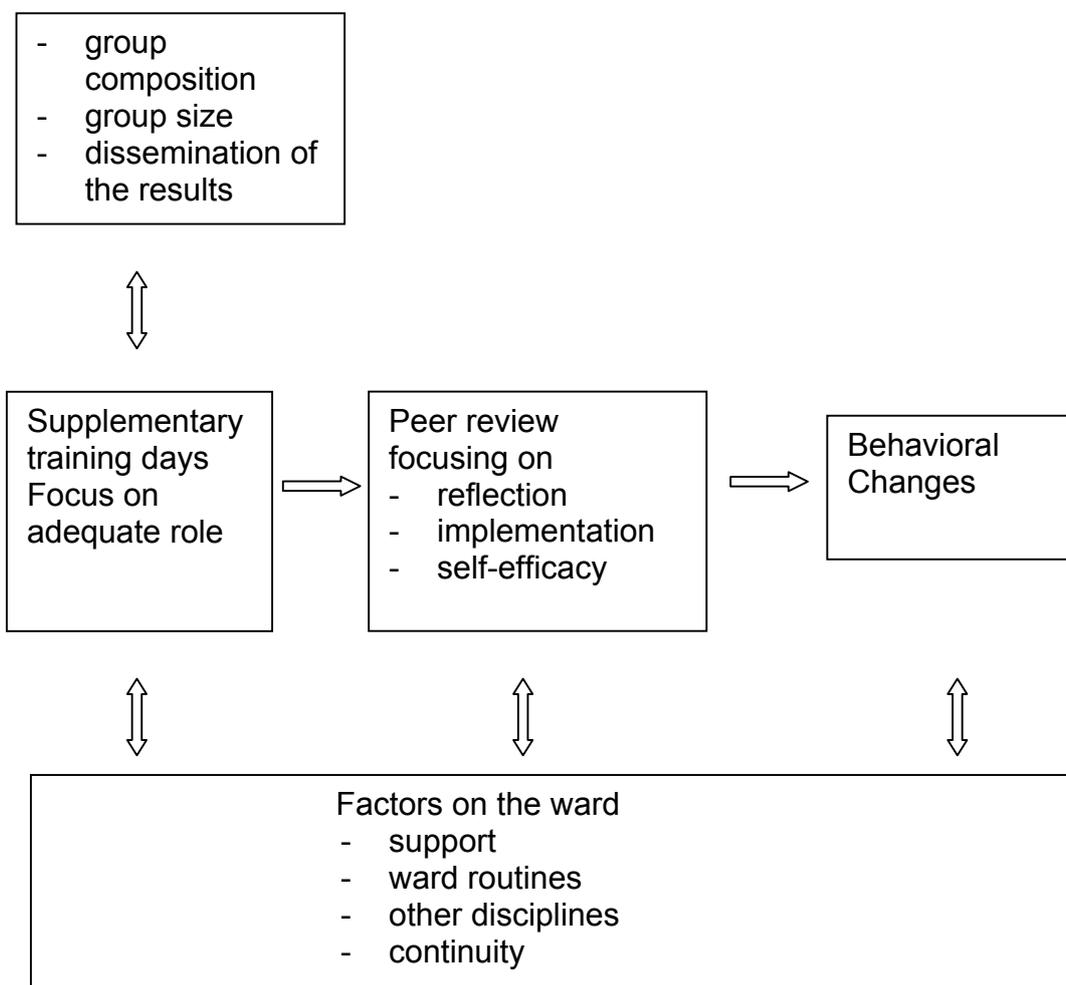
TARGET GROUP

Students are recruited by the head nurses on wards where palliative patients are regularly cared for as well as by team leaders of the home care district. Nurses who are admitted to the course in palliative care must have at least 1 year of experience as a registered nurse in a relevant workplace, no supplementary oncology courses, and work at least 24 hours per week. Oncology nurses generally are employed on an oncology unit at a university hospital or general hospital, while the course focuses specifically on nonspecialist nurses who regularly have to deal with palliative care when working in a hospital or in home care.

Group size should be kept to a maximum of 15 students. This group size offers students sufficient safety when practising skills or making a contribution. A mix of nurses working in hospitals and home care is optimal because the transfer from inpatient to outpatient care situations is often inadequate. In palliative care, the assurance of transfer and continuity is especially important. When students are confronted in a natural fashion with divergent and perhaps conflicting opinions and judgements (as part of the case study situations they have brought to the course), there is more understanding and insight into other nurses' situations. Moreover, when students from several institutions participate in a group, they are less likely to accept certain modes of operation simply because 'this is how we do it'.

STRUCTURE

The course is comprised of four 1-day sessions separated by an interim period of 2 weeks, followed by four peer review meetings under supervision of a lecturer during a 2-months period. The course focuses on knowledge, skills and attitude development of the students in various areas concerning palliative care. Topics such as symptom control, pain management and communication are addressed. These topics frequently emerge during subjective and objective need measurements. In addition, the course includes segments on "humour in palliative care", complementary care and "'dealing with death in other cultures". The segment on humour in this course concerns the extension of the informal role within palliative care. After all, a great deal of communication is concerned with daily topics. More spiritually oriented moments can consequently become more important.

After each session, the students are given an assignment with the intention of improving the knowledge and skills they have acquired and disseminating the skills on their unit. The peer review meetings take place in groups of five students. These meetings focus on the problems encountered with disseminating the material (e.g., resistance of co-workers), with the students offering strategies to apply the learned material as well as encouraging and supporting each other for persisting in the implementation of a new behavioral rule and searching for new

implementation routes. During these meetings students reflect on their own role and professional behavior.

To promote self-efficacy, especially by using two of the methods described earlier (i.e., functioning as a role model and verbal reinforcement of desired behavior), the lecturers are requested to demonstrate the desired behavior themselves during the course. For example, they may demonstrate and teach massage as an intervention in pain relief and the use of essential oils in complementary care. During the four peer review meetings, the lecturers encourage the students to continue to discuss the conditions under which they would like to implement the resolved behavior and how they can be helped in this process.

Box 2:   Themes offered in the course

Communication training with patients and volunteer caregivers
Pain
Ethical aspects
Symptom control
Complementary care
Death, loss and dealing with mourning (in multicultural perspective)
Humour in palliative care

ASSIGNMENTS

During the course, students are expected to complete three assignments that involve disseminating the results and optimizing the effects. The first assignment is for the nurse to organise a case study discussion on the ward to acquaint the team with the fact that he or she is taking a course in palliative care. During this discussion, the student must focus attention on a systematic presentation of the case study data and learn to ask clear questions. The case study can be focused on various subjects that are patient related, e.g., a patient who has severe problems with his or her family, a patient who refuses to accept that he or she is going to die, or a patient who still suffers from symptoms such as nausea and vomiting despite nursing interventions intended to decrease these symptoms.

Another assignment concerns identifying an aspect of care that students (together with another participant from the ward) would like to improve because they have ascertained a deficiency in this area. Pain often is chosen for this assignment. Nurses may notice that a certain pain assessment form is lacking on the ward or that a specific intervention such as massage is not implemented systematically, even though the necessary expertise may well be present. Other topics include the poor implementation of a 'bad news' interview, the absence of relevant literature and the lack of reporting about aspects of patient psychosocial

counseling. Based on the ascertained shortfall, students create a plan of approach and discuss this with their head nurse or team leader. The intention of this assignment is to make the supervisors aware that the unit nurses who are participating in the course have developed a plan to introduce a new mode of operation. The supervisor then has the opportunity to act as a coach, and if desired, to direct or assist the process. In addition, the students learn to practise implementation methods and are informed about the most common problems and resistances to innovation. This assignment is discussed afterward in one of the four meetings during the second part of the course. During this discussion (if applicable) a follow-up course of action is agreed to.

The four peer review meetings following the training days focus specifically on two subjects. First, the students are given the opportunity to contribute their own case studies of an individual patient. They then are asked to make a link with the theoretical principles and their own problems with the approach to the patient. During this process, learning to reflect methodically is important. It is through reflection that students learn to think more critically and improve their ability to perceive and use their own position in the hierarchical work structure (Platzer et al., 2000). Other students are encouraged to give feedback and propose possible solutions. Two peer review meetings are devoted to the implementation of the assignments that are given to the students between the course sessions. During these meetings, they become aware of factors that can influence the implementation process positively and negatively, such as resistance, the contribution of key figures, and the role of other disciplines. The students are provided with strategies they can use to continue the implementation of the innovation. Moreover, a peer review meeting is a suitable place to "blow off steam (if the implementation is not proceeding as desired) and to acquire fresh energy. The fact that the course is attended by students from various institutions with varying modes of operation has been especially valuable to this process. If the innovation has already been implemented at a different institution with good results, this provides a stimulus to continue.

CONCLUSION

The relationship between clinical patient results and furtherance of expertise is complex and with this patient category can only be reported in a qualitative and descriptive fashion (Jordan, 2000). In general, the nurses expressed a positive opinion about what they had learned. They valued both the furtherance of expertise and the opportunity for exchanging experiences and looking together for solutions to problems. They especially valued the diversity of subject matter. They also reported that they were able to apply what they learned. Offering a postgraduate course as is described in this article can help nurses optimize the quality of palliative care.

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Chapter 4

The usefulness of the SPIRS-PCN for measuring the empathetic capacity of nursing students

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G. Borm

ABSTRACT

In communication with all patients, especially patients receiving palliative care, empathy plays an important role. Little research has as yet been conducted into the development of the empathetic capacity of nursing students at various educational levels. An instrument that may be suitable for such research is the Staff Patient Interaction Scale for Palliative Care Nursing (SPIRS-PCN). The purpose of the article is to determine the validity and reliability of the SPIRS-PCN, an instrument to measure empathy in palliative care. The criterion related validity, homogeinity and interrater reliability of the SPIRS-PCN were determined in nursing students (n=357) who varied in gender, age, religious orientation, educational level and experience in patient care.

The validity of the SPIRS-PCN was underlined by identification of differences for religious orientation and the amount of experience. The variables gender, age and educational level were not significant in relation to SPIRS-PCN scores. The homogeneity (Cronbach's alpha=.80) and inter-rater reliability (ICC=.74) of the instrument were adequate.

We conclude that validity of the SPIRS-PCN was partially supported, whereas reliability was demonstrated. The instrument is feasible in educational situations; we recommend further research into the instrument's validity, especially in the progression of students' scores during the study programme.

INTRODUCTION

With increasing age people more and more often suffer from chronic diseases. These diseases all have a development that is specific for the individual, in which the chronic phase can gradually turn into the palliative phase (Davies & Higginson, 2004). Palliative care is an essential part of nursing care and is provided in various settings. It is a part of regular, non-specialized care (Ahmedzai et al., 2004). Palliative patients are usually cared for by nurses who have only basic nursing education and it is therefore important to begin addressing themes that concern palliative care early in the bachelor phase of the study programme. First year nursing students have as yet little or no practical experience and only basic theoretical knowledge. Besides technical knowledge of their specific field, high-quality verbal communication skills are especially important for nurses working in palliative care. Empathy is a crucial aspect in palliative care communication, for this reason the development of empathetic capacity of nursing students is important to this process.

To acquire insight into the validity and reliability of an instrument to measure empathetic capacity, students from various nursing study programmes on vocational and Bachelors level as well as students following a postgraduate course took the test in question (the Staff-Patient Interaction Response Scale - Palliative Care for Nurses – SPIRS-PCN).

BACKGROUND

Palliative care can be defined as 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 physical, psychosocial and spiritual problems. It uses a team approach to address the needs of patients and their families. It integrates the psychological and spiritual aspects of patient care and provides relief from pain and other distressing symptoms. Palliative care affirms life and regards dying as a normal process (WHO, 2002). There is an increased need for palliative care because the causes of death shift from acute to chronic (Davies & Higginson, 2004).

Caring for palliative patients is viewed as 'difficult care'. Anger among palliative patients and their families appears frequently (Philip et al., 2007). This might be difficult to handle. Registered nurses often indicate that they are not sufficiently competent to provide this type of care, and they believe that expertise development in this area is essential (Linder et al., 1999; Yates et al., 1998; Morita et al., 2004; White et al., 2004; Sandgren et al., 2006; Blomberg & Sahlbergh-Blom, 2007). After their first practical period, nursing students place 'dying and dangerously ill patients' at the top of the list of difficult and challenging practical

situations, while before the practical period they thought they would find that technical nursing skills were the most difficult (Cooke, 1996). Besides doubts concerning concrete aspects such as pain and symptom management, communication repeatedly emerges as an important area of uncertainty for students. Palliative patients themselves indicate that they want to be understood as an individual within a context of care and acceptance (Raudonis, 1997, Johnston & Smith, 2006). Nursing plays an important role in their quality of life perspectives in a trusting, empathetic and connected relationship (Woods et al., 2000, Mok & Chiu, 2004; Parker et al., 2007)

THE CONCEPT EMPATHY

Empathy is considered as an essential component in nurse behaviors (Hoffman, 2000; Hope-Stone & Mills, 2001; McCabe, 2004). In nursing literature, various approaches are taken with respect to empathy. Empathy can be understood as a characteristic that concerns an attempt to improve the well-being of another individual, whereby one's own distress is also reduced (Olsen, 2001). Moral principles also play a role in this process because these provide direction to the empathetic action of the care provider, especially in situations where help is offered to people whom we do not know (Olsen, 2001, Hoffman, 2000).
Empathy is also understood as part of a communication process (Kunyk & Olson, 2001). Gallop et al. (1990) use a process approach as their point of departure: empathy is a process comprised of multiple phases that are affected by a number of contextual factors. This approach is in line with the belief that empathy can be learned as part of a study programme and is therefore not only a characteristic that you either possess or lack inherently (Davis,1983; La Monica,1981; Aspegren, 1999).

Three phases can be distinguished in the empathetic process (La Monica, 1981; Gallop et al., 1990; Reynolds & Scott, 1999; Kunyk & Olson, 2001). These can be defined as

1. the inner process of empathetic listening and understanding of another individual (engagement and nurse perception),
2. the communication with the patient during which empathetic understanding is expressed (expressed empathy and matching of experiences) and
3. the perception of the patient concerning what the other is expressing; the patient continues or discontinues the communication on the basis of this perception (perceived empathy).

Nurse-expressed empathy is understanding what a patient is saying and feeling and communicating this understanding verbally to the patient (Olson, 1995). In this study we defined empathy as: the ability to perceive the meaning and feelings of another person and to communicate that feeling to the other (Kunyk & Olson,

2001). Cognitive as well as affective or emotional domains can be involved. During this process, elements such as perspective taking, standing in the patient's shoes and compassionate care are expressed. (Hojat et al., 2002b). Professional communication therefore requires an empathetic attitude and the skills to express this to the patient (Olson, 1995). In palliative care empathy is important to assist the patient with developing adequate coping strategies and to find a balance at the end of life (Yates et al., 1998; Hope-Stone & Mills, 2001; Murray et al., 2004; Philip et al., 2007).

INFLUENCING FACTORS

A number of factors can be listed that influence the degree of empathy expressed by the nurse. Gallop et al. (1990a) describe several factors that play a role during the various phases of the empathetic process. To understand another individual, it is important to share the perspective of the other; this is a skill that is linked to a certain degree of adulthood, maturity and moral development (Reid-Ponte,1992; Baillie, 1996; Price & Archbold, 1997; Olsen, 1997; Olsen, 2001). Forsyth (1979) found positive correlations between the level of empathy and factors such as level of education, age, gender and practical experience.

In the context of moral development, Blomquist et al. (1980) point out the influence of religion on the value system of nursing students. In a study into the value orientations they found a number of significant differences between religious and non-religious students. Religious students scored higher on values such as honesty and helpfulness. Wilkinson (1991) mentioned religion as factor which influences positively how nurses communicate with cancer patients.

Empathetic maturity is related to moral reasoning (Olsen, 1997). According to Duckett et al. (1997) moral reasoning development tends to increase while students are engaged in formal education, not just as they grow older.

Hojat et al. (2002a) and Bylund & Makoul (2002) concluded that female physicians scored higher on empathy than men. They tended to communicate higher degrees of empathy in response to the empathetic opportunities created by patients Gender proved also to be significantly associated with moral reasoning; women scored significantly higher in moral reasoning than men (Duckett et al., 1997). Female medical students were more patient centered and attuned to the psychosocial context of patients than their male colleagues (Haidet et al., 2002)

Becker & Sands (1988) found in their study that practical experience of five weeks during the first junior year was not an influencing factor but Layton & Wykle (1990) and Reid-Ponte (1992) pointed out that nurses' age, years of experience, and level of education were significantly correlated with some empathy skills.

Cutcliffe & Cassedy (1999) and Winefield & Chur-Hansen (2000) reported positive findings on a empathy measure after a communication training program in a Bachelors programme. However, the studies conducted by Hodges (1991) did not show any effect after such a course. Wilkinson (1991) revealed that nurses

who completed post-basic training in communication skills were no more effective in communicating with cancer patients than those who had not. Yates et al. (1998), Reynolds et al. (2000) and Razavi et al. (2002) found nevertheless that empathy had increased following a postgraduate training course in communication skills.

A problem in this regard appears to be that the training programmes are very different in duration and content and that test instruments show a great variation, so that their effects are difficult to compare.

In conclusion there is some evidence to suggest that a person's level of empathy is modified by that person's age, gender, religious orientation and level of experience and education.

EMPATHY AMONG NURSING STUDENTS

First year students in a Bachelors programme in nursing are generally still in the adolescent phase, which affects their level of moral development and maturity. Benner (1984) classifies these students as novices concerning the development of their professional competencies: during this stage they do not yet have any background understanding of the situation and have little or no practical experience. In their educational programme, there is an important emphasis on applying rules and orderly models so they can achieve a basic competency level that allows them to safely enter the profession. Lecturers guide students concerning the correct application of these rules. The manner of empathetic response is also an initial part of this model-based thinking. As the study programme progresses, empathy should increase proportionately. Within this context, it can therefore be expected that first-year students would score moderately on an empathy test.

MEASUREMENT OF EXPRESSED EMPATHY

A number of instruments to measure empathy are described in the literature. These instruments link up with the various phases of the empathetic process. In our study we are focused on phase 2 (expressed empathy) instruments. The Staff-Patient Interaction Response Scale (SPIRS), developed by Gallop et al. (1990b), was originally developed for use in psychiatry and concerns the phase of expressed empathy (phase 2). The SPIRS has demonstrated test-retest reliability ($r = .80$) and criterion validity ($r = .67$, $p<.001$)(Gallop et al., 1990). The study of Olson (1995) revealed hat the scores on the SPIRS of the nurses (n=70) did not correlate with decreased patient distress. A possible explanation for this finding can be that empathy in a therapeutic relation not always leads to reduction of distress.

For the present study, we chose the version of SPIRS modified by Yates et al., (1998) because it was modified specifically for use in palliative care: the SPIRS-Palliative Care Nursing (SPIRS-PCN). In their study they found a

significant increase in the scores of the students (n=181) after following a communication course in palliative care.

The SPIRS-PCN focuses on empathy as a multiphasic time sequenced process, and especially on the phase of expressed empathy in palliative care. During this phase it is primarily the behavioral component of the care provider that is important; it is this component that can be measured by the SPIRS-PCN.

This is the only instrument we know of that concerns palliative care and that measures the degree of expressed empathy of the nurse. It therefore appears to be a usable instrument to measure empathy as an outcome of communication training directed at oncological/palliative care.

The instrument is comprised of ten statements from two patients that express anxiety, depression, isolation, anger and mistrust (see appendix 1). The respondents are asked to write down their own verbatim response to these statements. Because a brief description of the situation is also provided, the respondent is able to imagine the patient's situation to a certain extent. The statements of the respondents are rated and coded (judge rating instrument) by nursing experts.

THE STUDY

Research question

Is the SPIRS-PCN a valid and reliable instrument to measure the expressed empathy of nursing students?

METHODOLOGY

To answer the question of (construct) validity we used the appropriate method of known-groups technique (Polit & Beck, 2004). We presented the instrument to various categories of students because we wanted to ensure variation in four student characteristics: gender, religious orientation, educational background and practical experience. These four characteristics were seen as significant criteria in a criterion related validity test of the SPIRS-PCN. We expected that these groups would score differently. According to the relevant literature, these factors can be expected to play a role in the scores on the empathy test.

The SPIRS-PCN was presented to five groups of students, because we have the intention to use it in an educational context. These groups had the following characteristics:

- Associate degree programme nursing students after five months of education in their first year (associate-1). These students were admitted to the nursing study programme at the vocational level following a lower

secondary school period of four years. They had completed a basic programme of communication skills with the emphasis on summarizing, reflecting, paraphrasing and continuing to ask questions; they did not yet have any practical experience.

- Associate degree programme nursing students midway in their second year (associate-2). These students had taken a basic course in communication skills and had participated in a four-week introductory practical period during their first year and a ten-week practical period in a nursing home during their second year.

- Students in a secular Bachelors nursing programme at the end of their first year (Bachelors-secular). These students were admitted to the nursing study programme at the Bachelors level following a higher secondary school period of at least five years.They had completed a basic course in communication skills. They had little practical experience, comprising only a four-week introductory practical period in a clinical setting.

- Students in a Bachelors nursing programme with a religious orientation (Dutch reformed denomination) at the end of their first year (bachelors-religious). In the Netherlands religious students have the opportunity to follow two nursing programmes with a religious orientation. Although religious students have free access to all the 17 Bachelors programmes, only a very small minority makes this choice. The religious students in this study were following a study programme in which religion (Dutch Reformed) was an important guide to their actions. These students came from a home environment in which religion plays an important role. They had completed a practical experience period of four weeks.

- Registered nurses in a post-graduate training programme in palliative care who had a number of years of professional experience.

Our hypotheses, based on the literature on related factors (above), were the following:
1. First year students would score moderately (scores between 40-50) on the SPIRS-PCN
2. Males would have lower SPIRS-PCN scores than females
3. Students with a religious orientation would have higher SPIRS-PCN scores than secular students.
4. Educational level would be positively correlated to SPIRS-PCN scores
5. Level of experience would be positively correlated to SPIRS-PCN scores

Testing of these hypotheses served as our operationalisation of the known groups technique. Potentially positive results for these hypotheses were seen as support for the validity of the instruments.

Validity was tested by the means of variance analysis. For the purpose of variance analysis, students were classified as having no experience (Associate-1 and Bachelors), moderate experience (Associate-2) or a great deal of experience (the palliative care nurses). With respect to the educational level, a distinction was made between the vocational programme, the Bachelors programme and the post-graduate programme.

We used Cronbach's Alpha to evaluate the homogeneity of the instrument. Intra-rater reliability was studied by comparing two scores from the same rater for 40 randomly chosen student performed SPIRS-PCN tests. Scoring for the same rater was performed with a four week interval period. Inter-rater reliability was assessed by obtaining scores from two independent raters for all student tests. For both inter- and intra-rater reliability, the Intraclass Correlation Coefficient (ICC) with fixed judges and mean ratings was used, as it is the most appropriate method to evaluate inter-rater reliability because of the heterogeneity of the scale (Shrout & Fleiss, 1979; Streiner & Norman, 2001; Watt-Wattson et al., 2000).

PROCEDURE

The SPIRS-PCN test was presented to convenience samples of students from the five categories listed above after their informed consent. They were given 30 minutes to write down the written responses to 20 written statements made by hypothetical patients.
The groups had the following characteristics:
The students in the associate degree programme were the youngest on average due to their four-year secondary education, and the experienced nurses in the post-graduate palliative care training programme were the oldest. The total respondent group comprised 303 females and 74 males. The male-female ratio in the group of the postgraduate palliative care nurses differed slightly from the other groups (see table 1).

Table 1:   Characteristics of the groups of respondents and mean scores

Study programme	Mean age	Male	Female	Educational level	Religion	Experience	Mean (s.d.)
Associate 1 (n=110)	17.1 (1.3)	0.14	0.86	Vocational	Low	Low	41.47 (4.96)
Associate 2 (n=39)	18.1 (1.4)	0.08	0.92	Vocational	Low	Moderate	45.26 (6.56)
HBOV-N (n=125)	19.2 (1.6)	0.14	0.86	University	Low	Low	42.16 (7.95)
HBOV-Z (n=43)	18.3 (0.6)	0.07	0.93	University	High	Low	48.33 (4.26)
Postgraduate (n=40)	40.9 (9.8)	0.25	0.75	Post-graduate	Low	High	55.50 (5.54)

CODING

The answers were ranked into nine answer categories by two expert nurses in palliative care in accordance with the instrument (with a possible score 1-9). This rating method requires extra attention for the inter-rater reliability, because there are no fixed answers (see appendix 2).

These nine categories are specifications of the four main categories:
- 1: very probably causes a defensive attitude
- 2-4: avoids interaction
- 5-7: engages in interaction
- 8-9: keeps the conversation going

VALIDITY AND RELIABILITY

Validity and reliability were the focus of the study. However, as a pilot study, the raters evaluated ten lists completed by senior nursing students and consulted with the researcher to clarify and specify the rating criteria. Terms in the instrument were decisively defined. Some rules were agreed upon in line with Yates et al. (1998). For example first of all the answers were categorized in the four main categories, afterwards they were scored in one of the nine sub categories. Open answers scored higher than closed answers and in case of longer answers the most dominant message scored. In case of different scores, agreement between the raters and the researcher was reached afterwards.

RESULTS

The mean scores per group were calculated (see Table 1). The respondents reacted divergently to the statements of the patients; this indicates that the instrument invited them to choose various approaches. Table 2 shows how the answers are distributed among the various groups.

Table 2:   Percentage of the answers for the main categories (10 scores per respondent)

	Associate-1 (n=1100 scores)	Associate-2 (n=390 scores)	Bachelors-secular (n=1250 scores)	Bachelors-religious (n=430 scores)	Postgraduate (n=400 scores)
Defensive attitude	5%	5%	11%	2%	0%
Avoids interaction	47%	36%	48%	32%	14%
Engages in interaction	48%	58%	37%	66%	74%
Keeps conversation going	0%	0%	4%	0%	12%

The factors educational level x experience interacted ($p<0.001$), so reference groups were defined and the different variables were integrated in dummies. This was also done for gender and religious orientation as men made up a very small proportion of the sample of religious students. Because the variables 'age' and 'experience' were highly connected we introduced both elements in the model, but only 'experience' was shown to be a significant factor.

The results of the analysis indicate that there are two variables that significantly affect the scores on the empathy test: the amount of experience and the religious orientation ($p<0.001$) (see table 3).

Table 3:   Influencing variables

	B	Std. Error	t	Sig	95% CI	
Reference group: Associate and no experience						
Associate and experience	14.493	1.679	8.631	0.000*	11.190	17.795
Bachelors and no experience	-.704	.854	-.824	.411	-2.384	.976
Bachelors and experience	6.429	1.028	6.254	0.000*	4.408	8.451
Reference group: female and non-religious						
Male and non-religious	-1.602	1.109	-1.445	.149	-3.783	.578
Female and religious	6.247	1.201	5.201	0.000*	3.885	8.608

- significant p< 0.001

Dummies that represented the influence of the amount of experience and the religious orientation explained 28% of the variance. The variables 'sex' and 'educational level' did not have a significant effect on the test results. The fact that the level of the study programme did not significantly affect the test scores is related to the small difference between the scores of students without experience in the vocational study programme and those in the Bachelors study programme.

RELIABILITY

Cronbach's alpha for the scale was good at alpha = .80. In addition, results for inter-rater reliability as computed for all tests (ICC = .72) and intra-rater reliability as computed for a random sample of 40 tests (ICC = .74) were satisfactory.

Several illustrative examples from the various categories of responses are given below. Few statements appeared in the first category. Examples of answers in all categories are given below (Scheme 1).

Scheme 1: Examples of students' responses to SPIRS-PCN patient statements

Category	Example of patient comment in SPIRS-PCN	Example of students' responses in this category
1. Very probably causes a defensive attitude	It is great to have a nurse that really understands me. Not like all the others.	Well, I certainly couldn't be the only one!
2. Avoids interaction	It is great to have a nurse who really understands me. Not like all the others.	That is my vocation, sir, I like to help people. Otherwise I would have done something else, like become a window washer.
3. Engages in interaction	Please don't ask me anymore questions, don't you ever give up?	I can imagine that the situation is really pressing in on you. But it is still important that you keep talking about it.
4. Keeps the conversation going (with encouragement to respond)	Why are you still trying to talk to me?	I could interpret your question in various ways. What do you mean actually?

DISCUSSION

This type of (pencil and paper) instrument inherently lacks the perspective of the patient and does not allow the researcher to ascertain what the current empathetic behavior of the respondent would be. It is unclear how the patients would respond in reality to the statements of the nurse. One finding is that the religious students score higher on the SPIRS-PCN than the secular students, which was in line with findings on the relationship between religious orientation and empathy in other studies (Blomquist et al., 1980; Hoffman, 2000). The likely explanation that religious students are more advanced in their moral development due to the attention that has been placed on value development during their socialization process is confirmed by our findings. However, it is not clear if empathy is a precondition of moral performance (Reynolds et al., 2000) or a consequence of socialization.

Using an instrument that focuses on the first phase of the empathetic process (engagement and nurse perception) of both religious students and secular students could clarify the differences between these groups. It is possible that SPIRS-PCN also measures maturation, which influences the ability to stand in another person's shoes, an important aspect of empathy (Hoffman, 2000). Because the present study concerns students, maturation is inherent to education and is a consequence of clinical experience. Patient contact and observing

colleagues during these contacts can have a positive influence on empathetic capacity (Olson, 1995).

By considering the answers, it becomes clear how the respondents interpreted the statements of the patients. Many short answers (Why? What do you mean? In what way?) without any further reflection were given especially by the young students. These answers were classified as: 'engages in interaction', because the patient was invited to give a clarification. This type of answer was also found in the study conducted by Gallop et al. (1990b) and makes clear that it is important to develop a training that is focused on more adequate and in-depth answers.

Our finding that the level of the initial degree programme (associate or Bachelors) did not appear to have any influence on the empathetic capacity of students can probably be attributed to the fact that the measurements of both the associate degree students and the Bachelors degree students took place at the beginning of their studies, a period during which both groups of students had similar characteristics regarding age and experience. This result is not in line with the findings of Layton & Wykle (1990), it might be possible that the divergence will appear after finishing the educational programme.

The sample of this study was a convenience sample; a random sample would have been more appropriate. Because of the specific character of the sample there is an intense interaction of the factors level of education and experience.

Finally, we found that gender had no influence on the scores, in contrast to previous findings such as that of Hojat et al. (2002b) and Bylund & Makoul (2002). This may be a consequence of the fact that men made up just 13% of the total sample and their scores were widely spread.

CONCLUSIONS

Three of the five hypotheses were confirmed:
- First and second year students in the initial degree programmes scored moderately on the SPIRS-PCN (mean 40-50).
- Secular students tended to score lower than religious students ($p < 0.001$).
- Students with experience scored higher than students with no experience ($p < 0.05$).

Two hypotheses were not confirmed:
- Educational level is positively correlated to SPIRS-PCN scores
- Sex is positively correlated to SPIRS-PCN scores

In accordance with our expectations, students in the initial degree programmes had moderate scores. Religious students without experience scored higher than a

comparable group of secular students. The greater practical experience of students in a postgraduate programme has a positive effect on the level of empathy. The postgraduate palliative care nursing students scored significantly higher than the pre-registration students.

The SPIRS-PCN scale is a reliable and suitable instrument to measure the expressed empathy of nursing students and registered nurses and provides insight into the strengths and weaknesses of their empathetic capacity. The results suggest that there are some indications for validity of the instrument that measures the communication phase of empathy.

The instrument could be used in measuring the effects of training during the various phases of the study programme, but needs further validation. The responses provided by study participants, provide indications about how training can be used. In their responses, the junior students frequently reached for quick solutions and clichés. This could be related to the fact that they had just learned these solutions in the basic (communication) programme and that they were not yet capable of seeing things from the perspective of another individual. In their answers, the students generally reached for 'standard solutions', which according to Benner (1984) is characteristic of novices.

Because SPIRS-PCN doesn't indicate how the respondent might act in the clinical situation, future research should be directed to determining whether this is a valid instrument for predicting clinical behavior. Since an influencing factor appears to be 'experience', it is useful to sort out what kind of experiences best develop empathic capacity and how factors on the ward influence this process.

To be able to distinguish between possible differences in empathetic capacities between students from various types of initial degree programmes, these students could be tracked in a follow-up study during their entire study programme. To acquire more insight into the influence of religion and the assumed influence of moral development, it would be useful to study the level of moral development of both secular and religious students in relation to the level of empathetic capacity.

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Appendix 1

SPIRS-PCN instrument

Please write a short response to each patient's statement as if you werke talking to the patient

Context 1: Frank is a patient in his mid-sixties. He was admitted to hospital 4 days ago for chemotherapy for advanced prostate cancer.

Stimuli: While under your care, this patient says:
1.1. 'Why should I get up – there is no place tot go'
      You answer:
1.2. 'You're the only one who treats me like a real person, not just a job.'
      You answer:
1.3. 'Why do you keep trying to talk to me anyway?'
      You answer:
1.4. 'People at home are going to have trouble with this.'
      You answer:
1.5   'You've no idea how I feel. I wish I were dead, and what can you do anyway?'
      You answer:

Context 2: Anne is a patient in her mid-twenties with a history of intravenous drug use, who was admitted to hospital 2 days ago for a liver biopsy. She is positive for Hepatitis B and HIV.

Stimuli: While under your care, this patient says:
2.1. 'I just want to stay in bed- please.'
      You answer:
2.2. 'My family would worry if they knew about this.'
      You answer:
2.3. 'Life is not worth living. There is nothing anyone can do.'
      You answer:
2.4. 'It's really nice having a nurse who understands me, not like the others.'
      You answer:
2.5. 'Please don't ask anymore questions…..Don't you ever give up?'
      You answer:

Appendix 2

Rating table

Likely to cause defensiveness
1. - confronting
    - strong negative response
    - denial of responsibility

Likely to terminate interaction
2. - generalization
    - clichés
    - use of flattering statements

3. - focused on oneself
    - accepting flattery of patient
    - looking for reassurance

4. - irrelevant opinion
    - giving presumptuous advice
    - giving presumptuous solution

Likely to engage in interaction
5. - trying to empower the patient
    - giving an explanation
    - asking superficially to the wellbeing of the patient
    - asking for clarification

6. - reflective listening attitude
    - expressing interest
    - acknowledging fears

7. - explanation of the situation
    - giving advice
    - expressing a relevant opinion

Likely to keep discussion going
8. - inviting the patient to continue the dialogue
    - inviting the patient to explore the situation

9. - trying to recognize feelings of the patient
    - recognizing the reality of the situation
    - investigating profoundly the feelings of the patient

Chapter 5

A test instrument for palliative care

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T. van Achterberg

ABSTRACT

This article describes a methodological study concerning the development of a test instrument that can be used for measuring the effects of a course in palliative care on registered nurses and licensed practical nurses. This test instrument is comprised of two parts: an expertise and insight test and a self-efficacy instrument and is tested in three panels.

The expertise and insight test appears to be usable for measuring the effects of a course in palliative care. The reliability and validity of the test were found to be adequate for evaluation of the effects of a post basic palliative care course.

The generality of the self-efficacy instrument was reduced because high-scoring items in the area of communication had to be removed. Moreover, the scores of the various categories of respondents discriminate less than expected on the basis of their previous education and the test results. Many respondents, regardless of their background, believed themselves to have a high level of competency. The self-efficacy instrument must therefore be used cautiously.

INTRODUCTION

Palliative care is an important field of attention within the disciplines of nursing and home care. Although palliative care is discussed in the initial professional training programmes for registered nurses and licensed practical nurses in the Netherlands, this theme is only a small part of the training programme. Once they have graduated, both sets of professionals come into regular contact with palliative patients, even though they do not consider themselves to be fully competent to provide this type of care. This is why palliative care training courses for registered nurses and licensed practical nurses have been developed which link up with their former education and experience (Adriaansen & Frederiks, 2002). When measuring the effect of this type of expertise enhancement, it is important to use a valid and reliable test instrument so that the effects of courses and continuing education programmes can be evaluated.

This article explores the basic principles on which this instrument was based and the method used to test the instrument itself.

AIM

To determine the effects of palliative care training courses, it is first of all important to use a valid and reliable test for expertise and insight. Because no instrument was available for the Dutch-speaking regions, this required development. The aim of this study was therefore to develop a method leading to a reliable and valid palliative care test.

Besides expertise and insight, the concept of 'self-efficacy' is also important in this regard; previous research has shown that the degree to which individuals can judge their own efficacy influences the effects of a course (Aber & Arathuzik, 1996; Campbell & Dickson, 1996). Therefore, it was also useful to design a reliable and valid test instrument in the area of self-efficacy. Both of these parts together could comprise the complete test instrument.

Expertise and insight regarding palliative care
Palliative care is being given increasing attention in various health care disciplines. This is because it is becoming more and more recognized that patients who can no longer be treated in a curative fashion should retain the highest possible quality of life during their final phase of life. Palliative care can be defined as continuous care for patients and their families by an interdisciplinary team at the point when a cure in medical terms can no longer be expected (WHO, 1990). However, the main emphasis in this type of care concerns activities during the final phase of life of the patient, because symptoms can then become most problematic and can threaten an acceptable quality of life. In the Netherlands, although there are special wards for palliative patients in some hospitals and nursing homes, palliative care is also

frequently provided on wards in hospitals and in home care. It is desirable that nurses who are not employed on a specific ward but who regularly provide care for palliative patients, also are able to provide high quality care.

The basic study programme (Bachelors degree) is insufficient for this purpose. The programme is set up in such a broad fashion that nurses must acquire a multiplicity of competencies. Palliative care is part of this curriculum, but the degree of application depends greatly on the type of ward on which the students do their internships. Moreover, due to the short duration of the internships, they acquire little experience. To an increasing extent, licensed practical nurses and district nurses are also confronted with palliative care because more and more people are dying at home or in a nursing home (Teunissen & Willems, 1999). In a nursing home, terminal patients are usually found in both somatic and psychogeriatric wards.

At present there is little insight in the effectiviness of a post basic training. Therefore it is important to develop a test which is suitable for both nurses and licensed practical nurses, even though both categories have been trained at different levels and exercise their profession in different ways.

Self-efficacy
Generally speaking, the intention of study programmes is to cause students to change their behavior towards improved and more effective functioning in a specific area. This change is not only caused by more expertise and improved skills, these changes must also be integrated in conscious behavior that can also be expressed under unexpected conditions. Self-trust plays an important role in this process and is referred to in the literature as self-efficacy (Bandura, 1997). Perceived self-efficacy is concerned with judgements of personal capability. This concept plays a role in predicting specific behavior.

Although self-efficacy has a general component where people evaluate themselves as being more or less successful in their actions, this is still primarily task-specific, where there is little relationship between the general belief about the degree of successful action and the more specific evaluation (Pond & Hay, 1989). An individual believes himself or herself to be capable in a specific area, such as mountain climbing, solving difficult addition problems or providing palliative care. Attention to self-efficacy is important in general health education, but is also important to other educational processes (Arber, 2001; Laschinger, 1996; Ford-Gilboe et al., 1997). Efficacy beliefs are influenced by acquisition of cognitive skills, but they are not merely a reflection of it. The degree of self-efficacy can be influenced positively by means of instruction and education. (Schunk & Rice, 1987; Bandura, 1997). Before students begin a specific course, they have already made an estimate of their self-efficacy in the relevant area. A low valuation beforehand, for example the expectation of not being able to communicate properly with palliative patients and their families or being unable to provide sufficient interventions to control symptoms, can partially influence the motivation of a student to take such a course. At the end of a course, the level of self-efficacy

should have increased, especially when a number of possible sources of self-efficacy are used in the course, e.g. exposure to actual models who exhibit useful skills and strategies and deliberate performance feedback (Bandura, 1997). There are other factors that influence the actual behavior of the nurses on the ward after a post basic training (Adriaansen & Frederiks, 2002) but they are beyond the scope of this article.

METHOD

For designing this test instrument, two approaches are important: expertise and insight on the one hand and self-efficacy on the other. An instrument must be developed which is suitable for measuring both these aspects in the target group: registered general nurses (who have followed a 4 year educational programme at Bachelors level) and licensed practical nurses (who have followed a 2 year educational programme at intermediate level) working in clinical settings and in home care. This concerns a methodological study focusing on the development of a valid and reliable instrument that can be used in the continuing nursing education of palliative care. The following phases can be distinguished in this process:

1. Exploration of the literature that focuses on selecting suitable testing instruments regarding both the expertise and insight test and the self-efficacy instrument.
2. With regard to knowledge and insight, it became obvious rather quickly that one of the instruments from the literature study appeared to be quite useful, the palliative care quiz for nurses (PCQN) developed by Ross et al. (1996). Therefore we chose to embark on a limited trajectory by supplementing the instrument and applying it to the Dutch situation. For this purpose a limited panel of six experts was consulted once. Regarding the self-efficacy instrument, a literature study did not provide any instruments that were suitable for this situation. To achieve predictive power, measures of personal efficacy must be tailored and must represent graduations of task demands within those domains (Bandura, 1997) Therefore a number of relevant items were developed that concern a wide-range of areas in palliative care which reflect the Dutch situation. Besides the items must represent the objectives of the post basic course, which is a sign of content validity. Efficacy beliefs vary on several dimensions, which has effects on the structure of self-efficacy scales (Bandura, 1997). Efficacy beliefs differ in generality, level and strength. The instrument was presented to an expert panel of 14 individuals to evaluate its relevance and generality.
3. Both instruments were tested with various groups of respondents. One category was formed by nursing students of a Bachelors programme in their fourth year (n=24) who were specialising in general care.

Another category was comprised of nurses from two hospitals and a home care organisation who regularly cared for palliative patients in their work situation, but who had not taken a specialised supplementary training programme. They were selected by the management of the organisation according to a convenience sample (n=57). Of this group, 19 were invited to take part in a course in palliative care. A third category were licensed practical nurses involved in the study were employed in three nursing homes and a home care organisation (n=50). A number of them were selected by the ward supervisors and completed the test before they took part in a palliative care course (n=29). The others worked at the same ward as the students, but did not take part in the course. They were selected by the course participants according to the 'snowball method' for a similar situation: the same educational background and the same number of years of experience (n=21).

4. Comparison of the group scores of the three groups of respondents and an analysis of possible differences between these various groups concerning both the expertise and insight test and the self-efficacy instrument.
5. Determination of the internal consistency of the expertise and insight tests and the self-efficacy instrument with use of KR-20 and ANOVA.

RESULTS

Respondents
The group of students consists of 24 persons in their fourth year of study which is directed on general care. Only 4 of them (16%) have experience with palliative care. The group of nurses who participated in the course and the group who did not were compared with each other in relation to general nursing experience and experience with nursing cancer care. This comparison showed that 90% of the participants and 71% of the non-participants had more than 5 years of experience in nursing; 69% of the participants and 59% of the non-participants had more than 5 years of experience with nursing cancer patients. There were more non-participants with less experience.

Categories of licensed practical nurses offered a more homogeneous picture: 90% of the course participants and 86% of the non-participants had more than 5 years of experience in nursing. This group is more heterogeneous concerning the experience in nursing cancer patients. 72% of the participants and 47% of the non-participants had more than 5 years of experience of caring for cancer patients. The group of licensed practical nurses who were going to take part in the course therefore had more work experience, both in caring for patients in general and caring specifically for cancer patients. Due to the method of respondent recruitment there was (except with the students at the higher professional school of nursing) only partial monitoring of the selection, especially regarding the category of non-course participants of the licensed practical nurses.

We were unable to acquire a picture of the non-response rate of the non-course participants.

Expertise and insight test
In order to measure newly acquired competencies in palliative care, aspects of expertise, insight and attitude are important. Expertise and insight can be measured by means of a written test, while attitudinal aspects frequently emerge through behavior. This requires observation by the researcher, or the nurse or licensed practical nurse can be asked about this retrospectively. However, it is known that actual behavior and reported behavior frequently do not match (Polit & Hungler, 1991). Therefore we chose to limit the items on the test to expertise and insight which has as consequence that competencies cannot be measured by this test only.

Literature is available about partial aspects of palliative care. These studies concern pain and symptom management (Francke, 1994; Schuit, 1999) or the development of the more psychosocial aspects of palliative care: empathy, communication and self reflection (Booth et al.,1999; Yates et al., 1998; Von Klitzing,1999). Instruments frequently focus on these partial aspects. The relevant literature also advocates observations in clinical practice (Jordan et al., 1999). Little information was found on the psychometric qualities of the measurement instruments used. An exception to this general pattern is the 'palliative care quiz for nurses' (PCQN) (Ross et al., 1996), a test comprised of expertise and insight questions specifically developed for palliative care. Besides measuring expertise, this test is also intended to spot the most frequently occurring misunderstandings in the area of palliative care. This test has three main dimensions: the principles and starting points of palliative care, controlling symptoms and pain, and psychosocial and spiritual care.The test has an internal consistency of 0.78; this assumes homogeneity and a correlation coefficient of 0.56 for test-retest reliability in that particular situation (Ross et al., 1996). The successfull application of this test in an undergraduate nursing course is described by Arber (2001) and Loftus & Thompson (2002).

Because the psychometric aspects of this test were adequate, we therefore decided to develop a Dutch variant that linked up with this instrument.

The original test is comprised of items which primarily concern knowledge that is usable in the clinical setting and was presented to students and nurses who are employed in such a setting. To make the test easy to score, there are three categories of answers: 'Yes', 'No' and '?'. The '?' response is intended to reduce the risk of participants making a guess and to make a distinction between not knowing the answer and having an incorrect understanding of the answer (Van Berkel, 1999, Ebel & Frisbie, 1991). The 20 test items of the PCQN were translated into Dutch and presented to six palliative care experts in order for them to evaluate the items regarding their relevance to the situation in the Netherlands and to get an indication of the validity of the test. These experts were nursing specialists active in practice (2), nursing researchers in the area of palliative care

(2) and senior lecturers at a higher professional school of nursing (2). The panel's evaluation led to the modification of one item because the medication referred to in this item is not usually prescribed in the Netherlands.

The supplemented items were derived from the contents of a post basic course in palliative care, and these parts of the course were in turn derived from a literature study regarding the needs of palliative patients on the one hand and the objective and subjective needs of nurses on the other (Adriaansen & Frederiks, 2002). The items cover various areas of palliative care where the basic principle is primarily the competencies to be acquired. These competencies concern the areas of symptom control, psychosocial supervision of the patient and those close to him or her, acting as a member of a team (which may be multidisciplinary) and the position of the participant regarding the patient. Moreover, a number of questions were added as they were used in a Dutch instrument developed by Persoon & Frederiks (1999) that specifically focuses on home care provision. The course material and the competencies to be acquired are therefore the starting point for the development of these items; this contributes to the validity (Van Berkel, 1999). This process finally resulted in a test comprised of 40 items: 7 items in the dimension 'basic principles of palliative care', 22 items in the dimension of symptom management and 11 items in the dimension of psychosocial and spiritual care. A test of such magnitude is acceptable because it does not require very much time from the respondents to complete.

The 20 items of the PCQN test supplemented with newly developed items were then presented to 24 nursing students.This was done to evaluate whether the results of the Canadian students regarding the 20 items on the PCQN were in accordance with those of the Dutch students and whether all the items were formulated in an understandable fashion. Based on the remarks of the students, the word selection in several items was modified. While doing this, we were careful to avoid changing the intention of the question. Items that were assumed to lie within the expertise field of a fourth year nursing student (for example, the term adjuvant therapies) were retained for the nurses and the nursing students. For the licensed practical nurses, this term was later changed to 'supplemental therapies'. Then the 40-item test was presented to the other two categories of respondents: nurses and licensed practical nurses.

Four items for which all three categories of respondents achieved very high scores (above 80%) were removed because these are insufficiently discriminating. Although these scores might indicate good knowledge, it is nearly impossible to increase these scores as an effect of a course. Therefore, these items could not be used for our purpose: developing a scale to monitor effects of a post basic course palliative care. This applies to two items from the original PCQN ('suffering and pain are synonymous' and 'losses lead to burn-out'), and two items from the newly added questions ('pain is influenced by concern about family' and 'it is sensible not to drink too much when little appetite'). A score below 20% for all three categories did not occur, so that no items were removed which were too difficult or too unclear.

This results in a test of 36 items with 7 items directed on basic principles of palliative care, 22 items on controlling symptoms and pain and 7 items on psychosocial and spiritual care.

Box 1:   Knowledge and insight test

Basic principles of palliative care

1	Palliative care, suitable for acute health deterioration
5	Family members at bedside important at time of death
9	Palliative care requires emotional distance from nurses
12	Palliative care can be combined with aggressive treatment
17	Loss of a distant relative is easier to bear than that of a loved one
26	Individual Health Care Professions Act forbids complementary actions by licensed practical nurses
35	Radiotherapy is suitable as a palliative treatment

Controlling symptoms and pain

2	Lowest possible morphine dosage
3	Progress of disease determines pain treatment method
4	Adjuvant therapies important to pain management
6	Drowsiness during final days of life reduces need for sedation
7	Addiction is a serious problem with morphine use
8	With opiates, also provide medication to regulate bowel movements
10	During terminal phase with dyspnoea, treatment with medications can lead to respiratory suppression
13	Using placebos is compatible with treatment of certain types of pain
14	High dosages of codeine cause more nausea and vomiting than morphine
16	Symptoms of chronic pain differ from those of acute pain
18	Pain treatment in other cultures is different due to magical thinking
19	Skin care during radiation treatment with soap and powder
21	Drowsiness resulting from opiates disappears after a few days
22	Morphine leads to euphoria
23	Maximum dosage of opioids for individual patient
24	The effect of opioids can decrease due to tolerance
25	Most common side effects of morphine
27	During treatment with cytostatic drugs it is sensible to flush the toilet at home with the lid closed
28	During treatment with cytostatic drugs, it is important to wash clothing at home at 60 C
32	Morphine is effective in reducing sensation of dyspnoea
33	Lemon swabs are suitable for painful mouth and swallowing symptoms
36	Hiccups can be controlled with carbonated beverages

Psychosocial and spiritual care

11	Men are quicker to display sorrow than women
15	Body washing of Islamic patient by blood relative
20	Tiredness is a side effect of radiotherapy during irradiation of rectal carcinoma
29	Information is suitable for reducing anxiety
30	Rejecting help indicates that informal caregivers are overburdened
31	Relationship between family and patient affects subjective burden on family members
34	Depression can be caused by medicines

Internal consistency of the test

The reliability of a test is seen as an important indication of its quality. In order to determine the internal consistency and the homogeneity of a yes/no/? test, the Kuder Richardson 20 formula (KR-20) was found to be appropriate (Ebel & Frisbie, 1991; Van Berkel, 1999). This formula calculates the correlation between the scores for the questions. The test was given to three groups: fourth year nursing students, nurses with experience and licensed practical nurses with experience. For calculating the internal consistency, the scores of these three groups of respondents were merged (n=157).

The internal consistency for the 36 item test was 0.71 (KR-20), which indicates an acceptable degree of homogeneity.

In an ANOVA test it was determined whether groups with different characteristics earned a different score by using the average scores on the remaining items. This score is determined by assigning 1 point for a good answer, 0 points for a question mark and subtracting 1 point for an incorrect answer. Based on this test, a significant difference was found between the scores of nursing students, nurses and licensed practical nurses (F= 18.094, df = 2, P = 0.000). The Bonferroni test indicates that nurses differ significantly from licensed practical nurses (mean difference 5.9502, P = 0.00) and nursing students (mean difference 2.9868, P = 0.048). In both cases the nurses scored higher. The scores of the nursing students and licensed practical nurses were slightly different; the students scored higher (mean difference 2.9633), but this difference was not significant (P = 0.058).

Ranking

We then looked at the items on which all three groups scored poorly. For this purpose, a ranking was determined for each category of items with the lowest percentages of correct answers.

Table 1:   Ranking of lowest scoring items

Nursing students (n=24)	Nurses (n=83)	Licensed practical nurses (n=54)	Total
32 (effectiveness of morphine)	12 (aggressive treatment)	5 (family members)	5 (family members)
10 (dyspnoea)	5 (family members)	12 (aggressive treatment)	12 (aggressive treatment)
6 (drowsiness)	4 (adjuvant therapies)	10 (dyspnoea)	10 (dyspnoea)
23 (maximum dosage of opioids)	30 (rejecting help by informal caregivers)	14 (side effects of codeine)	32 (effectiveness of morphine)
5 (family members)	14 (high dosage of codeine)	32/18 (effectiveness of morphine/ pain treatment in other cultures)	14 (side effects of codeine)

What is striking here is the difference between nursing students on the one hand and the nurses and licensed practical nurses on the other. Nursing students scored most poorly on the items concerning symptom control, while nurses and licensed practical nurses scored most poorly on items that had to do with more general basic principles of palliative care.

Finally, the results were compared with the results of the original instrument based on the average percentage of correctly answered items to test the validity of the new instrument. A distinction was made between 18 items from the original Canadian test (from which the two highest scoring items in the Netherlands were removed) and the 36 items of the test as a whole. This was done to evaluate whether the score on the newly developed questions was in accordance with the score on the questions on the original PCQN test. This comparison showed that the results of the total test hardly differed from the results of the first 18 items. Dutch students had a somewhat higher score regarding the 18 items on the original test than the Canadian students, while Canadian nurses answered more items correctly than Dutch nurses. Canadian licensed practical nurses and Dutch licensed practical nurses scored at virtually the same level.

Table 2:   Percentages of correct answers from Canadian and Dutch respondents

	Dutch students	Canadian students	Dutch nurses	Canadian nurses	Dutch LPNs	Canadian LPNs
18 items	57	46	65	73	52	56
36 items	60		65		50	

Self-efficacy instrument
Because self-efficacy is linked to specific tasks, an instrument that measures self-efficacy must be customised for the relevant area. In this case, the instrument must concern the self-efficacy of the nurse or the licensed practical nurse in situations where palliative care is provided. Bandura (1997) distinguishes three dimensions of self-efficacy: level, strength and generality. In other words, how difficult is it for an individual to express the behavior (level), how strong is the individual's belief that he or she can complete a certain task (strenght), and to what extent does the individual believe that he or she can generalise this behavior to other situations (generality). These dimensions must also be present in the instrument being developed. The requirement regarding the dimension 'level' is satisfied if the statements have varying levels of difficulty. The strength requirement is satisfied if the respondents can choose from a variety of answers varying from, "I am quite certain," to "I am completely uncertain". The generality requirement is satisfied if a variety of situations that concern palliative care are described in the instrument. In the literature no existing self-efficacy instrument regarding palliative care was found.

A draft question list of 30 items was presented to 14 experts in the area of palliative care to get an indication for validity of the instrument. The experts on this panel were comprised of nursing specialists employed at academic hospitals (5), integral cancer treatment centres (3), an organisation that provides home care (2) and senior lecturers from a higher professional school of nursing who specialise in palliative care (4). The basic principle was that when at least 11 of the respondents (70%) indicated that they believed the item was relevant (possibly following a modified formulation), the item was included.

Four items were supported by fewer than 70% of the respondents and were removed; this was because they, for example, believed that the item was outside the competency field of the nurse. Ultimately there were 26 remaining items with examples of various and approved situations.

Examples of self-efficacy items

I think that I am capable of:

- counselling a patient about how nausea can be alleviated
- protecting the interests of the patient when dealing with other disciplines
- talking with an anxious patient so that he or she feels safe, thereby reducing his or her anxiety
- discussing my inability to deal with certain palliative patients with my co-workers (other nurses).
- ascertaining a patient's nutritional problems and providing advice about measures to reduce these problems
- discussing my inability to deal with certain palliative patients in a multi-disciplinary team context
- offering the patient various forms of complementary care, such as the use of herbs and foot massage.

The degree of difficulty of the items (dimension of level) was determined by asking 14 health science and nursing lecturers at a nursing school to rate the items on a five point scale which varied from 'very difficult' to 'very easy'. After all, it is desirable to spread the degree of difficulty across various items (Bandura, 1997). The lecturers were asked to rate the items for the three categories of nurses, licensed practical nurses and nursing students. The results show that the lecturers assumed a spread in the degree of difficulty which also differed for the various categories of respondents (see Table 3).

Table 3: Degree of difficulty of the self-efficacy items estimated by lecturers (n=14) in percentages compared to the degree of difficulty estimated by the various categories of respondents (n=157)

Lectur-ers	Estimate lecturers Easy/ very easy	Estimate respondents Easy/very easy	Estimate lecturers Not difficult/ not easy	Estimate Respondents Not difficult/not easy	Estimate lecturers Difficult/ very difficult	Estimate Respondents Difficult/ very difficult
Nurses (n=83)	34	55	26	25	40	20
Licensed Practical Nurses (n=54)	22	49	23	33	55	18
Nursing students (n=24)	39	51	24	31	37	18

The expectation of the lecturers was that the nurses and nursing students would believe themselves to be more competent than the licensed practical nurses. Nursing students and nurses should more frequently ascertain that an item is easy or very easy, and less frequently ascertain that an item is difficult or very difficult, than licensed practical nurses. The table shows an acceptable spread in the degree of difficulty.

After this, the self-efficacy instrument was presented to the nurses (n=83), licensed practical nurses (n=50) and nursing students (n=24). It turned out that there were 8 items for which 80% or more of the respondents in the various groups indicated that they were easy or very easy.

These were:
- talking about feelings
- discussing inability to deal with certain patients with co-workers (nurses)
- discussing inability to deal with certain patients in a multidisciplinary context
- referring to the correct disciplines
- protecting the patient's interests when dealing with other disciplines
- listening to a patient when he or she is discouraged
- offering support in the form of attention, understanding and comfort
- providing advice if there are problems with bowel movements.

It is striking that these items involve the aspect of cooperation and communication with both team members (in the same and other disciplines) and with the patient. Respondents believe they are competent or very competent in these areas. This leads to a ceiling effect because the ratings on these items are almost impossible to improve and the potential effects of a course will not be visible. If these 8 items are removed, the distribution shown in table 3 appears.

An ANOVA test indicated that there is no significant difference between the various groups at the instrument level. The averages are 47.18 (nurses), 47.02 (licensed practical nurses) and 49.57 (students).

At the item level, however, the three groups did differ significantly from each other on six of the 18 items.

Table 4:   Differences between three groups on item level

Stems	P	groups
Offer complementary care	0.004	(students and nurses scored higher than LPNs)
Integrate specific customs	0.04	(LPNs scored higher than students)
Information about final life phase	0.000	(students scored higher than nurses and LPNs)
Discuss desire for euthanasia	0.000	(LPNs and students scored higher than nurses)
Advise about oral care	0.017	(students scored higher than LPNs)
Massage for pain	0.04	(nurses scored higher than LPNs)

Internal consistency
In order to determine the internal consistency of the self-efficacy instrument, Cronbach's alpha was calculated. This amounted to 0.80. An analysis at the item level indicated that two items had a low item-to-total correlation (talking with a patient so that he or she feels safe 0.13, and providing information about psycho-energetic therapy 0.17). These items probably concern specific aspects of the self-efficacy instrument. In view of the generality requirement of a self-efficacy instrument and because Cronbach's alpha would have hardly increased for the entire test without these items, they were not removed.

DISCUSSION

In this study we attempted to be systematic in order to arrive at a reasonably valid and reliable instrument. The usability of the concept was tested in various steps. The influential factors and those that may distort the results were mapped out as much as possible. A number of comments about this process are included below.

This instrument plays only a limited role in the assessment of competencies in palliative care, because an evaluation in practice is not included. It is not known to what degree knowledge, insight and self-efficacy are related to actual behavior, although there is some evidence about a positive relationship between assumed self-efficacy and behavior in practice (Murdock & Neafsey, 1995; Ford-Gilboe et al., 1997)

Of the respondents, the nursing students and the nurses formed the most homogenous groups regarding internship experience and work. The licensed practical nurses recruited co-workers who turned out to have less experience. It is possible that they would have had better results at the expert and insight test as well as at the self-efficacy instrument if these two groups of nurses would have been more comparable.

The expertise and insight test was primarily comprised of items that focused on knowledge and to a lesser extent on insight. Attitudinal aspects were not taken into consideration. These should be tested in a different fashion in order to measure the effects of a course in palliative care. The predictive validity was not investigated, i.e. it was not determined whether a high score on the knowledge and insight test and on the self-efficacy test was also reflected in actual behavior in practice.

Regarding the variation of the degree of difficulty of the self-efficacy instrument (generality), it turned out that there was a sufficient difference between the degree of difficulty estimated by the lecturers regarding the categories of participants (nurses, licensed practical nurses and nursing students). The answers of the respondents themselves showed a smaller variation than was expected by the lecturers. It was especially licensed practical nurses who believed themselves to be much more competent by answering more in the category 'relatively easy' and 'very easy' than assumed by the lecturers. This could be caused by the fact that the selected lecturers (from higher professional education) had insufficient insight into the professional practice of licensed practical nurses because they have little contact with this group in practice. This could have possibly been prevented by involving lecturers from a training programme for licensed practical nurses.

It is possible that the high estimates of self-efficay in palliative care settings have been influenced by knowledge and experience in other areas. However, the results of the instrument also showed that students may also estimate their own expertise in the area of palliative care too highly. These students have only limited experience.

The expert panel only took part in a single round to comment on the items of the self-efficay test, after which the definitive formulation of the item took place. A further consideration of the items that were ultimately chosen during a second and third round (the so-called Delphi techniqe) could possibly have led to a further refinement of the formulation.

CONCLUSION

The expertise test developed from the study has a solid internal consistency. If the items which are not discriminating (for which the respondents scored above 80%) are removed, 36 items remain. Both of the items removed from the PCQN test concern the basic principles of palliative care: 'suffering and pain are synonymous' and 'repeated losses lead unavoidably to burnout'. However, in the original test, these items were discriminating. This is perhaps due to cultural differences in educational nursing programmes and working conditions on the ward.

As expected, licensed practical nurses scored lower on the test than nurses and nursing students. This is an indication of the validity of the test. They have less training (only two years) and until recently, had less contact with specific palliative care than nurses because little palliative care was previously offered in nursing homes. Nursing students also scored lower on this test than nurses. Although students still have this material fresh in their memory, this is apparently compensated by the experience of the nurses. This assumption was also confirmed by considering the type of item where the various categories scored poorly. Nursing students scored poorly on items concerning aspects of symptom control, while licensed practical nurses did not score as well on items concerning general principles of palliative care. The scores on the individual items provide an indication of the incorrect answers made by the various respondent groups. This indicates that the nurses and licensed practical nurses have greater experience with actual symptom control, while nursing students are more well-informed about the general aspects of palliative care because they have studied this in theory. However, they are less familiar with symptom control because they have hardly been able to apply this knowledge due to their scanty experience during internships.

The modified PCQN turned out to be a valid and reliable instrument to use as a basis for a test that can be used with all three categories of respondents. Moreover, the scores for the newly developed items showed a high degree of accordance with the original items from the PCQN. The assumption is that the expertise and insight test therefore appears to be useful for measuring the effects of a training course in palliative care.

The self-efficacy instrument, due to its design, satisfies the variation requirement regarding strength: the answer categories can be placed on a five point Likert-scale, varying from 'I am entirely uncertain about this' to 'I am quite

certain about this'. The validity of the instrument is enhanced due to the involvement of an expert panel.

There was an expected spread in the degree of difficulty, although this spread in the estimation of the lecturers is more than was indicated by the scores of the nurses, licensed practical nurses and nursing students. The score shows that there is little difference in assumed competencies between the various groups, which was not expected. This may be caused by the systematic over-estimation of licensed practical nurses regarding their own competency. This could possibly be related to a lack of self-insight and reflection capacity which, in view of their educational background, could also not be expected from them. The test results for the licensed practical nurses, which were significantly lower than both of the other groups, are not in accordance with their opinion of their own competency. This discrepancy also indicates less self-insight.

The difference between the answers of teachers and students is also remarkable. One could expect that the lecturers would know these students well because they are 'their students' and that they would have a realistic picture of their performances. Moreover, one would expect nursing students (higher professional education level) to have access to a greater reflective capacity. This is an important point of attention during their study programme, which has the intention of training them to estimate their own competencies at a realistic level. On average, the scores of the nursing students on the expertise test lie between those of nurses and licensed practical nurses, which is not in accordance with their own expectation. They overestimate themselves. Because only expertise and insight is being tested, and not behavior, it is unclear whether they display behavior in practice that lies closer to their own competency expectation.

The high scoring items on the self-efficacy test that were removed are primarily concerned with communication. This leads to the conclusion that such items are less suitable for a self-efficacy test. It is also possible that these items are formulated in general terms which are not specific enough. Efficay beliefs are structured by experience and reflective thought rather than being a collection of specific self-beliefs (Bandura, 1997). Despite the difference in experience between nurses, licenced practical nurses and students they all scored high on the communication items. Apparently the temptation to score positively is high, even though the behavior in practice might not be in accordance with this score (Fielding & Llewelyn, 1987; Wilkinson, 1991). The removal of these items, however, does lead to a smaller level of generality for the instrument because one dimension of functioning in palliative care (the communication skills) is limited.

Changes in a positive sense resulting from taking a training course, with many items that already score positively, is difficult to measure. Moreover, the instrument makes little distinction between groups, even though this was expected. The instrument must therefore be used cautiously when measuring the effects of a course in palliative care. Although the expectation is that a shift, or further shift, would occur as more items were included that would score in the category 'easy' or 'very easy', this shift is possibly marginal because many respondents already

believe themselves to be competent. It is even possible that respondents, due to an increased insight into their lack of expertise, would more frequently indicate that they are not competent or not yet competent.

Finally, it is important to also observe the behavior in practice of students, nurses and licensed practical nurses in order to evaluate to what extent the results of the instrument are in accordance with their actual activities. This would increase the insight into the validity of the instrument.

Although we realise there are limitations and that especially the self-efficacy instrument must be used with caution, we still believe that this study has provided a valuable contribution to the development of instruments for testing the effects of a course regarding palliative care for nurses and licensed practical nurses.

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Chapter 6

Empathy development in students during a Bachelors programme in nursing

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ABSTRACT

Empathy has been considered as a multidimensional construct. Development of empathy is influenced by factors as maturity, gender, practical experience and education. Research on empathy has yielded inconsistent findings, probably due to the conceptualization of the construct of empathy and the variety of used instruments.

This study used the SPIRS-PCN instrument to study empathy levels among Bachelors nursing students during four years of their study. The results of the measures showed an improvement of their levels of empathy, mainly influenced by a specific communication skills programme and clinical experience. However, improvement of empathy could not be clearly related to specific elements of the students' programme.

INTRODUCTION

When nurses provide care to patients, good communication is an essential part of the caring process. For patients in difficult circumstances, such as patients who are seriously ill or who have a poor prognosis, this is even more important. A major aspect of this process is empathy, a dimension that plays a major role for nurses (Kindlen & Walker, 1999; Yates et al., 1998, Reynolds, 1999; Fields et al., 2004). Basic and advanced nursing programmes both pay attention to empathy as part of communication skills. A field of care provision where empathy is especially important is oncological and palliative care. This care focuses on patients who are confronted with the diagnosis of cancer or for whom recovery is no longer possible, which makes them especially vulnerable. In addition they are often troubled by physical symptoms. Patients indicate that they value a supportive relationship and they believe it is important to feel that they are understood (Duhamel & Dupuis, 2003; Johnston & Smith, 2006). Health professionals find it difficult to communicate with these patients en do not feel well prepared (Wear, 2002; Sheldon et al., 2006), but every nurse is expected to acknowledge patient concerns and offer psycho-social guidance in order to create an adequate therapeutic relationship. In this context empathy is positively correlated with patient satisfaction, clinical outcomes and therapeutical adherence (Hojat et al., 2002) Therefore it is important to pay attention to empathy development in basic training programmes in nursing.

The purpose of this study was to examine the effects of a communication training programme and clinical experience on empathy development in nursing students, during a Bachelors programme in nursing.

BACKGROUND

Various descriptions of 'empathy' can be found in the literature. Several authors view empathy as a multidimensional concept with cognitive, emotional and behavioral dimensions (Davis 1983; Eisenberg et al., 1994; Hojat et al., 2002; Reynolds et al., 2000). These dimensions refer to aspects such as other-oriented feelings (perspective taking, the ability to identify and understand patients' emotions and perspectives, the ability to show concern and sympathy) and self-oriented feelings (the ability to cope with personal anxiety and distress). Empathic understanding is especially important in contacts with persons who are very different from ourselves (Olsen, 1997).

Gallop et al. (1990) consider empathy to be an interactive process of communication in which the health professional wishes to know and understand the subjective experience of the patient. There are several steps to this process. The inducement phase starts when the nurse observes the patient who is personally expressive. When the nurse is engaged, a matching process begins.

The empathic process is continued if the matching phase results in a match and an associated desire to help. Empathy can help to create an interpersonal climate, which enables patients to express their needs and to feel autonomous and which help them to participate in their treatment (Reynolds & Scott,1999; Larson & Yao, 2005)

Empathy is exhibited in behavior as 'expressed empathy': words spoken to the patient combined with the concurrent non-verbal actions of the care provider. The patient who encounters these actions from the care provider reacts in his or her own way.

Empathy is influenced by several factors. A certain level of maturity and moral development is relevant, as ageing is likely to improve our ability to take other perspectives and to see the world through someone else's eyes (Forsyth, 1979; Price & Archbold, 1997; Olson, 1997; Olsen, 2001). This effect certainly seems relevant for young students participating in basic training programmes. It is reported by Branch (2000) that medical students have difficulties to approach students with empathy in a less caring ward culture because they feel they have to combine their personal moral values with the principles of the clinical work. Critical reflection is mentioned as educational intervention that promotes empathy (Branch, 2000; Cunningham et al., 2006; Olthuis, 2007).

Gender plays a role; several studies found higher empathy scores with female physicians (Hojat et al., 2002; Bylund & Makoul, 2002; Hojat et al., 2004; Chen et al., 2007).

Practical experience is likely to affect the development of empathy in nursing students positively (Forsyth, 1979; Reid-Ponte, 1992). This influence can possibly be explained from the known effects of role modelling (Bandura, 1997; Branch, 2000). In a study by Layton (1979), role modelling was identified as a powerful mechanism in junior medical students. However, the clinical environment can also hinder empathy development in junior students in situations where there is a lack of time, a lack of privacy, fatigue and the presence of unsupportive colleagues (Lauder et al., 2002; Bellini et al., 2002; Bellini & Shea, 2005). These aspects are mainly found in studies among residents.

Education could affect empathy development. Wheeler & Barrett (1994) concluded in their review that communication training programmes to increase empathy among nursing students were demonstrated to be slightly effective, but most of the studies had a small sample size and a convenience sample (Reid-Ponte,1992; Yates et al., 1998; Cutcliffe & Cassidy,1999; Reynolds et al., 2000; Winefield & Chur-Hansen, 2000; Wilkinson et al., 2002; Razavi et al., 2002). However, the positive effects of an intensive training programme in clinical practice were shown only with supervision (Heaven et al., 2006). Stepien & Baernstein (2005) concluded in their review of empathy education in undergraduate medical programmes that the studies revealed an increased level of empathy due to communication skills workhops, but that most studies were methodologically poor.

In summary, previous studies indicate that empathy development can be promoted by education. However, only a few studies addressed empathy development in

nursing students, and many of these studies had important limitations. Therefore, knowledge of empathy development during a Bachelors programme in nursing is still limited.

THE STUDY

Research Questions
1. What is the development of the level of empathy in students during a Bachelors programme in nursing?
2. Has a specific course on communication skills within a Bachelors programme a positive effect on the students' levels of empathy?
3. What are the effects of clinical experience within this programme on the students' levels of empathy?

Methodology

Design
The study employed a time series design and evaluated the level of empathy of two groups of nursing students of a Bachelors nursing programme with a different curriculum sequence and amount of clinical practice at four points in time.

Sample
Two groups of students, Dual Bachelors students (group 1) and Fulltime Bachelors students (group 2), followed a four-year Bachelors nursing programme with a foundation period of one year. The Fulltime Bachelors students had during the main phase three clinical periods in various settings (general care, psychiatry, and home care). The Dual Bachelors students were employed at a hospital and followed an in-service programme with 85 weeks of clinical practice. During their clinical periods students participated in critical reflection activities in small groups. Compared to the Fulltime Bachelors students, the Dual Bachelors students had more practical experience, but there was less patient diversity because they concentrated mainly on one specific setting (general care or psychiatry) (see Figure 1).

Figure 1:   Overview of study design

Time	Group 1 Dual Bachelors students	Group 2 Fulltime Bachelors students
6 mo.	Theoretical courses	Theoretical courses
1 mo.	Clinical period (4 weeks)	Clinical period (4 weeks)
T0: Simulated patient encounter: general base line score First SPIRS-PCN empathy assessment		
3 mo.	Communication programme	Theoretical courses
T1: Second SPIRS-PCN empathy assessment		
10 mo.	Clinical period (24 weeks) Theoretical courses	Theoretical courses Communication programme
T2: Third SPIRS-PCN empathy assessment		
20 mo.	Theoretical courses Clinical period (12 weeks) Theoretical courses Clinical period (45 weeks)	Clinical period (16 weeks) Theoretical courses Clinical period (16 weeks) Theoretical courses Clinical period (24 weeks)
T3: Fourth SPIRS-PCN empathy assessment Assessment of clinical experience		

Procedure
Previously, the level of empathy for all nursing students was assessed in a simulated patient encounter (general base line score). During this interview the student tried to elicit and explore patient concerns and identify and respond to a patient's need for information in a systematic way. The interview was scored by two experienced observers. This assessment was a regular component of the educational programme and provided both student and teacher with feedback on the student's entrance level.

Data for the study were first collected after seven months (T0) when students of both groups had completed their first short clinical placement period of four weeks. This period was a regular element of the first-year curriculum for all students.

The Dual Bachelors students (group 1) first followed a communication course in which they learned to communicate with patients in a difficult situation (see Figure 1). During the same time the Fulltime Bachelors students (group 2)

followed a theoretical study programme, without communication training. After the first communication training session, group 1 participated in a clinical period. Group 2 followed the communication training in the same period.

Communication course
The communication course (20h) was identical for the two groups. The course consisted of six interactive workshops on communication skills and was a specific part of a larger course on general hospital and outpatient care. During the communication course three types of patient encounters were simulated in order to give students ample opportunity for demonstrating and acquiring skills, as well as for receiving feedback about their performance. Scripts for the three patient encounters were written to reflect (1) a patient who has just received the news of a bad prognosis, (2) a patient undergoing cancer treatment who is experiencing helplessness and worry and (3) a patient in mourning who has just lost a significant other.

After a lecture on theoretical insights and general principles in nurse-patient communication and the concept of empathy, students practised their skills during role-taking sessions. In these sessions, experienced actors played the roles of patients. The communication sessions were all videotaped and discussed with both other students and the tutor. Afterwards, students reflected on their empathy and skills in personal reports. These reports had to include personal learning goals for the near future.

For the Dual Bachelors students, the course took place in the second semester of the first year. The fulltime students received this communication course in the second year of their Bachelors programme.

Clinical periods
The dual students followed three clinical period during their main phase (24 weeks, 12 weeks and 45 weeks respectively). With the exception of the period of twelve weeks these clinical periods were in the same setting. The fulltime students had two clinical periods of 16 weeks throughout their second and third year and a clinical period of 24 weeks during their fourth year in varying healthcare settings. The dual students had more practical experience compared to the full time students during their course.

Theoretical periods
Prior to the clinical period, students followed a theoretical course focusing on the category of patients they would be caring for. Other theoretical courses had topics such as quality of care, nursing research and health promotion.

Measurement of empathy

Improved empathy can be measured in educational settings with different instruments (Wheeler & Barrett, 1994; Yates et al., 1998; Winefield & Chur-Hansen, 2000; Hojat et al., 2002; Fields et al., 2004; Stepien & Baernstein, 2005).

In this study the Staff-Patient Interaction Scale - Palliative Care for Nurses (SPIRS-PCN) was used to assess empathy. The SPIRS-PCN is a 'response empathy' test especially designed for palliative care to measure the level of expressed empathy. It was adapted from the original instrument by Yates et al. (1998). The original instrument which was used in psychiatry was validated by Gallop et al. (1990) and Olson (1995).

Subjects are given 'trigger statements', potentially made by a patient to which the subject responds. The patient's statements reflect anger, despair, isolation, depression and mistrust. The instrument scores various behaviors such as expressing feelings, explaining rules, offering a solution, proposing a useful action and referral. The instrument reflects the 'expressed empathy' of the care provider.

The level of empathy in students was assessed at four points in time (T0-T3; Schedule 1). These points in time were chosen to allow for the evaluation of the programme as a whole, as well as to evaluate the impact of several programme components. More specifically, the points in time allowed for the evaluation of the impact of the communication course within the programme and the contribution of periods during which the students gained practical experience in nursing.

The SPIRS-PCN was chosen for this study as it reflects statements of patients in difficult circumstances. These responses require empathic responses from care providers. As such these patients strongly appeal to the empathetic capacity of the students. According to Razavi et al. (2000) appropriate changes in communication skills are merely observable in highly emotional role-playings. These trigger statements can be seen in line with role-playings. However, such observations are often not feasible in nursing education as they require equipment, advanced organisation and a good deal of the students' and teachers' time

It might be argued that the statements in the SPIRS-PCN can be viewed as a simple description of a complex reality, which could have little correlation with actual behavior (Evans et al., 1993). Replies to these statements in this scale are elicited outside the context of everyday care practice, where working conditions, care burden and fatigue are relevant conditions (Yates et al., 1998). Moreover, taking the perspective of a 'paper patient' could be easier than perspective taking in real encounters. However, the results in studies by Gallop et al. (1990) are very similar to the results found in studies using patient encounters in real-life clinical practice, thus supporting the validity of the SPIRS-PCN.

Two raters coded the completed SPIRS-PCN forms at T0 and T1, two others coded the completed forms at T2 and T3. In case of different scores, agreement was reached afterwards. In addition, 40 randomly-chosen instruments were

evaluated twice by the same rater with an interim period of six weeks to evaluate the test-retest reliability.

Respondents
A convenience sample of nursing students of a Bachelors programme (fulltime and dual) was recruited. At an information session 210 first year students received verbal information about the study and consent forms. The SPIRS-PCN at T0 was completed by 63 Dual Bachelors students (group 1) and 64 Fulltime Bachelors students (group 2). They represented 61% of total students in the first year. All four measurements were completed by 39 Dual Bachelors students and 34 Fulltime Bachelors students.

Analysis
Differences within and between groups were compared using student's-tests for paired and independent data, respectively.
Reliability of the SPIRS-PCN in this study was evaluated by computing Cronbach's alpha for the scale and by computing Intraclass Correlation Coefficients (ICCs) for intra- and interrater reliability. For all analyses, $\alpha = 0.05$ (two-sided) was used as the level of statistical significance.

RESULTS

The level of internal consistency across the items on the SPIRS-PCN, assessed with Cronbach's α was 0.72. The coders achieved an ICC for intrarater reliability of 0.74 (n=40) and an ICC for interrater reliability of 0.72 (n=125).

Students who missed one or more measurements were not different compared to students who completed the four measurements taking into account sex, the course entry assessments and the mean score on the SPIR-PCN at T0. The group of dual students had more compliers (see Table 1).

Table1: (Full) compliers versus students who missed at least one assessment/partial compliers.

	Dual students			Fulltime students		
	Total Dual Students (n=67)	Full compliers (n=43)	Partial compliers (n=24)	Total fulltime students (n=65)	Full compliers (n=34)	Partial compliers (n=31)
Age (mean)	20.0 (3.9)	19.2 (1.6)	21.2 (5.7)	18.9 (1.5)	18.2 (1.0)	19.2 (1.6)
Female	87%	86%	89%	88%	91%	86%
Male	13%	14%	11%	12%	9%	14%
Mean T0 SPIRS-PCN (s.d.)	44.1 (8.6)	44.6 (8.6)	43.1 (8.9)	43.2 (7.4)	44.9 (7.5)	41.6 (6.3)
Course entry assessment (s.d.)	6.5 (1.0)	6.5 (0.9)	6.3 (1.0)	6.4 (0.9)	6.3 (0.9)	6.5 (0.9)

Development of empathy during the Bachelors programme (see Table 2)

During the Bachelors programme, the scores of the total group of students increased significantly from baseline (T0) to the final measurement (T3) (p<0.001). Among dual students the scores improved by approximately 13 points on the SPIRS-PCN scale, while the increase for fulltime students over the same period was approximately 10 points. The difference in the overall increase between the two groups was not statistically significant (p=0.24).

The correlation between T0 and T3 scores was 0.09. This means that baseline scores do not predict the final level of empathy in these students.

Table 2: SPIRS-PCN scores at T0-T3 for dual and fulltime student and total group of students

	Group 1: dual students (n=43)			Group 2: fulltime students (n=34)			Total group students (N=77)		
	mean	s.d.	range	mean	s.d.	range	mean	s.d.	range
T0	44.6	8.4	20-60	44.9	8.1	27-59	44.7	8.0	20-60
T1	49.5**	4.9	37-62	47.6*	5.9	35-60	48.6**	5.3	35-62
T2	53.3**	5.3	41-62	53.5**	7.7	35-68	53.5**	6.4	35-68
T3	57.4**	5.6	45-70	55.0	7.0	41-72	56.4**	6.4	41-72

** significant (p<0.001) versus previous time point * significant (p<0.05)

Effects of the communication course

After the communication course, the scores on the SPIRS-PCN significantly increased from 44.6 to 49.5 in the dual students in group 1 (p<0.001), and from 47.6 to 53.5 in the fulltime students in group 2 (p< 0.001). In the group of fulltime students (group 2) the increase in SPIRS-PCN scores after the communication course (T1-T2, from 47.6 to 53.5) was slightly higher than the increase in scores

for the earlier period (T0-T1, from 44.9 to 47.6) with mainly general theory courses (p< 0.05) and the range of the scores increased positively.

Effects of clinical periods
The scores of the total group increased significantly after clinical experience from 53.5 to 56.4 (T2-T3): p< 0.001). For the dual students in group 1, SPIRS-PCN scores increased after successive clinical periods from 49.5 to 53.5 (T1-T2: p<0.001) and from 53.5 to 57.4 (T2-T3: p<0.001). However for fulltime students (group 2) the scores did not significantly increase after the more extensive clinical periods between T2 and T3 (p=0.43).

The scores in dual students improved significantly and scores in fulltime students increased only moderately and insignificantly after the final practice periods in the T2-T3 interval.

There is no relation between the assessment scores of the last clinical period and the SPIRS-PCN scores of T3 (Pearson-'s r = 0.02)

Illustration of changes in scores
The response statements are categorised in 4 main categories with a score between 1 and 9:

    1: very likely to cause defensiveness   score 1
    2: avoids interaction   score 2-4
    3. engages in interaction   score 5-7
    4. keeps the conversation going   score 8-9

The distribution of scores across the possible answer categories changes between the measurement points. Table 3 illustrates a shift in the scores in the direction of more engagement in interaction.

Table 3:   Distribution of scores across categories of SPIRS

	Defensive (score 1)	Avoids interaction (score 2-4)	Engages in interaction (score 5-7)	Keeps conversation going (score 8-9)
T0 (n=77)	8%	36%	51%	5%
T3 (n=77)	1%	17%	72%	10%

Scheme 1: Examples of student's replies in different categories.

SPIRS–PCN patient statements	Respondent reply category Avoids interactions * generalisations; * thanks for/accepts patient's flattery * gives presumptuous advice	Respondent reply category Engages in interaction * invites exploration by further questioning
You're the only one who treats me like a real person, not just a job.	* I'm glad to hear you're satisfied with what I do for you. * I think we all try our best in caring for you . * Well, I believe we all try in our own way. I'm sure nobody thinks you're just a 'job'. * We are all human beings to begin with!	* Do you feel my colleagues treat you that way? * I'm sorry if that is your experience. * Do you feel that others don't see you as a human being? How come? * Why do you feel like that? * I get the impression you are not happy with the way things are going. Am I right?
You have no idea how I feel. I wish I were dead, and what can you do anyway?	* I try to help you to the best of my abilities. * I try very hard to give you the best care possible. * I'm sorry, but there's not a thing I can do. * Alas, I can't do anything about it….	* This must be very difficult for you. As if somebody took away the ground from beneath your feet. Could you tell me about it? * If you could start by telling me how you feel, maybe I could do something for you.
Why do you keep trying to talk to me anyway?	* Because I like it, I enjoy talking to you! * Because I think you like it. * Well, you hired us to care for you, sort of… * Why not? It's so quiet if I don't. * We can't go through life in silence.	* I want to know your thoughts and feelings, so I can help you where I can. * I believe it's important to share your worries. I hoped you would share them with me. If you'd rather not, that's okay. * I understand that talking may be tiring for you, but it could also make you feel better.

The total scores in de areas 'engages in interaction' and 'keeps the conversation going' increase whereas the answers in the category 'avoids interaction' strongly decrease.

When the results of the first and last SPIRS measurements are compared with each other, it can be seen that during the last measurements students are better able to engage in perspective taking and showing concern, which are crucial aspects of empathy. During the first measurement, more answers concerned self-directedness and generalisations. Scheme 1 contains examples of these responses.

DISCUSSION

The empathetic capacity of student nurses increases as their study programme progresses. Similar end scores have been documented with nurses in palliative care settings (Yates et al.,1998). The scores of the students increased throughout the programme: during the theoretical modules, the communication course and after experience in practice. It is possible that an external factor such as maturation has an effect on this increase in empathy scores on the SPIRS-PCN (Yates et al.,1998). A possible sensitisation effect is less probable because there were several months between the various measurements. As the study programme progresses, the students acquire more practical experience and their role development increases to the stage of an advanced beginner (Benner, 1984). They learn from observing role models in practice, and when providing information they can place their acquired knowledge more in the perspective of the patient. During their practical periods they get supervision of experienced nurses which is beneficial for the transference of the acquired skills (Heaven et al., 2006).

In our research, empathy increases due to the whole of these experiences. The progression of the scores on the SPIRS-PCN is in accordance with the results of a study by Rexwinkel & Pilot (2006) which studied Bachelors nursing students in the Netherlands with the aim of assessing their development during their study programme. Rexwinkel investigated to what extent students found themselves to be competent in the areas of learning ability, knowledge and insight, application, judgement and communication. The total scores varied from 30% for students in their 'foundation year' to 65% for students in their fourth year (range: 0-100%). For communication, the scores ranged from 18% to 68%, with the highest increase in estimated competency during the third year after a practice period.

The increase in empathy scores is not in line with the results of physician empathy development. According to various studies, empathy scores remained stable (Mangione et al., 2002) or even decreased during their study programme (Bellini et al., 2002; Hojat et al., 2004; Bellini & Shea, 2005; Rosen et al., 2006). A possible explanation is that doctors feel more competent in the cognitive aspects of their professional qualifications when considering treatment; they perhaps focus on these characteristics during their encounters with patients at the expense of the affective and empathic side. In addition, their levels of anxiety, depression and fatigue increased during the study programme. Gender may also play a role. Fields et al. (2004) found only a slight difference in empathy scores between female physicians and female nurses at the final stage of their study programme. Both groups showed an increase in these scores.

Hojat et al. (2002) showed that empathy scores were associated with ratings of clinical competence. These results were not found in our study.
The reliance on 'formula responses' and inviting explanation in a superficial way by asking questions such as 'why…' declined, but still remained high.

Limitations of this study

This study concerns a limited number of students who completed all four of the measurements. However, with respect to a number of characteristics, these students are comparable with the original group of students who participated in the T0 measurement.

In this study, the correlation of SPIRS-PCN and actual behavior was not assessed. Actual behavior is influenced by the concerns and needs of a real patient and by the professionals' environment and support on the ward (Wilkinson, 1991; Branch, 2000). It appears to be impossible to isolate an intervention in a Bachelors programme in such a way that it can clearly be shown as an influencing intervention. It is possible that individual educational activities as a communication course cannot be distinguished in a four-year programme, in contrast with a more theme-oriented post-registration course.

Although multiple teaching activities were used during the communication course (theoretical role preparation, role play with simulated patients, focused feedback), it is possible that insufficient transfer took place and the six meetings were not enough to generate a clear effect.

CONCLUSIONS

The study programme, which inherently involves acquiring clinical experience and critical reflection, had a positive influence on the empathetic capacity of nursing students. However, it is not unequivocally due to the specific course in communication skills, although this course did have a positive effect. We assume that the combination of theoretical periods in which attention is paid to the development of advanced communication skills, supervised practice and critical reflection promotes empathy development in nursing students to an adequate level. The answers which were given in the instrument demonstrated this development and showed a shift from avoidance of interaction to engagement in interaction. This engagement can be characterised by sharing understanding and perspective of the other, providing information, offering an appropriate solution and reflection of expressed feelings. These elements reflect both the affective and cognitive domain of empathy.

However, we cannot rule out that - regardless of training – maturation contributes to empathy development in young adults.

Recommendations

Further research is required to validate the SPIRS-PCN against real-life performance in practice compared with acting in a practical or simulated practical situation and to relate to result measurements with patients (level of distress, patient perceived empathy and patient satisfaction, clinical outcomes and adherence).

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Chapter 7

Effects of a postqualification course in palliative care

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ABSTRACT

Aim. This paper reports a study to determine the effectiveness of a postqualification course in palliative care in terms of increased knowledge, insight and self-efficacy among Registered and Licensed Practical Nurses.

Background. The importance of measuring the effectiveness of postqualification courses in palliative care for nurses is widely recognised. The benefits of such courses are often merely described in terms of satisfaction of the course participants

Method. A convenience sample of nurses was studied. The effect measurement comprised a pretest/post-test quasi experimental design. Two instruments were used: a comprehensive variant of the Palliative Care Quiz for Nurses and an especially developed domain specific self-efficacy instrument for palliative care. These were used before and after the course.

Findings. The course had a positive effect on knowledge and insight level as well as on the level of self-efficacy. The main improvements were related to pain and symptom management. Participants seemed to be able to increase the effects of the course by implementing certain products on the wards, such as clinical lessons, a pain assessment scale and relaxation massage.

Conclusions. Palliative care courses can make a significant contribution to nurses' knowledge and insight, as well as their self-efficacy in providing palliative care.

INTRODUCTION

Although palliative care is addressed in the initial degree programmes, Registered Nurses (RNs) often state that they do not feel fully competent about this type of care and that they need continuing education. To meet this need, we developed a postqualification course in palliative care. This course focuses not only on cognitively-oriented knowledge transfer, but also on attitudinal aspects, communication and skills needed to apply the acquired knowledge on the ward.

Little was found in the literature about the effects of such courses. Moreover, the results that are available show that the effects are often poor. This article describes the results of effect measurement in the areas of knowledge/insight and self-efficacy. This measurement was based on two instruments: the Comprehensive Palliative Care Quiz for Nursing (C-PCQN), and a Self-Efficacy Instrument for Palliative Care (SEP), which was developed by us. In this article, we also pay attention to a number of outcomes of the course that have been shown to be applicable in the ward setting.

LITERATURE REVIEW

Palliative care focuses on maintaining patients' quality of life during their final phase of life. It is important for these patients that the symptoms of their illness and side effects of their treatment can be reduced to an acceptable level, and pain alleviation plays a major role in this. Moreover, patients believe it is important that they are listened to and that they can discuss their problems with health care professionals (Degner & Gow 1988; Ogle et al., 1997; De Groot et al., 2000).

Health care professional must be able to create a good social environment in which patients can distance themselves from their approaching death and humour and attention to "everyday" matters have an important place (Hunt, 1991; Langley-Evans & Payne, 1997). Patients at this stage indicate that they have a need to talk about giving meaning to their life and other spiritual aspects. Problems such as fear and depression are frequently reported (Reynolds et al., 2002; Stromgren et al., 2002; Radbruch et al., 2003).

Health care workers acknowledge that they lack competencies in a number of these areas (Fothergill-Bourbonnais, 1992; Samaroo, 1996; Sellick et al., 1996; Weissmann 1996; Weissmann et al., 1998; Linder et al.,1999; Yates et al., 1998; Ellerton & Curran-Smith, 2000).

This has led to recommendations that a postregistration education programme be developed (Booth et al., 1996; Kruijver et al., 2000). Because the majority of palliative patients have cancer, a number of themes from oncology courses are relevant to palliative courses.

Some oncology courses focus, primarily, on a single theme, such as pain management (Francke, 1996) or communication skills (Booth et al., 1996; Heaven

& Maguire, 1996; Wilkinson et al., 1998). However, a number focus on multiple themes, including pain and symptom management, communication skills and psychosocial and spiritual care. Wilkinson et al. (1998) suggest that the effects of an integrated programme should be greater than those of courses focusing on single themes. Sometimes educational activity focuses less on developing expertise in care provision, and more on improving reflection on action (Von Klitzing 1999; Platzer et al., 2000). If course participants are capable of adequately reflecting on their professional practice, they will also be capable of evaluating whether their attitudes and actions are congruent with professional norms and the needs of the patient.

The highest level of testing is to test the effects of continuing education on actual interaction with patients in practice. At this level, competencies can be measured. However, with palliative patients, measuring effects is problematic because of several factors, such as deterioration health and resistance from health care professionals to asking for informed consent (Field et al., 2001; Spilsbury & Meyer 2001). Sometimes simulated patients are used (Kruijver et al., 2000). In most cases, effect measurement is limited to participant satisfaction with the course and the increased knowledge provided (Arber, 2001). Sometimes effects are measured using course participants' perceptions of increased competency (Weissman et al.,1998) and satisfaction with their own functioning (Jordan et al., 1999; Brown, 1999) or changed attitudes (Kaye & Loscalzo, 1998). This approach is based on the assumption that course participants are reliable self-evaluators, especially if self-evaluation is combined with supervisor evaluation (Wood,1998). However, self-reported improvements do not always correspond with increased patient satisfaction (Brown, 1999).

The instruments used to measure effects vary greatly. To measure expertise, tests such as the Palliative Care Quiz for Nurses (PCQN) can be used (Ross et al., 1996; Arber, 2001), and scales such as the Stait-Trait Anxiety Kaye & Loscalzo, 1998) are used to measure the attitudes of course participants. In a number of cases, researchers have used scales they constructed themselves, and which focus specifically on attitude (Razavi et al., 1988) or on participants' satisfaction with their own level of reflection (van Klitzing, 1999).Scale (Garcia de Lucio et al., 2000) and the Fear of Death Scale (

Ross et al. (1996) and Arber (2001) used the PCQN to measure the effects of courses in palliative care on students and RNs. Both report improved scores on a number of items. Moreover, the self-confidence of course participants increased with respect to caring for palliative care patients (Arber, 2001). In an evaluation of educational programmes for nurses on communication, Kruijver et al. (2000) state that the studies reviewed show limited or no effects on nurses' skills, nurses' behavior and patient outcomes. Following a programme focusing specifically on pain management, Francke (1996) found that the quality of interventions relating to pain assessment had improved, but that use of pain intensity scales had not increased.

Acquiring more knowledge and skills is not enough to allow that which is learned to be applied in practice (Francke, 1996; Booth et al., 1999; Weissmann et

al., 1998). Various factors in the clinical settings, such as level of support from supervisory staff and team members, and work pressure, also have an important effect on this process (Kruijver et al., 2000). This means that attention must be focused on "embedding" the results of the course in practice.

A COURSE IN PALLIATIVE CARE

On the basis of literature search, we developed a postqualification course in palliative care with two variants, one for registered nurses (RNs) and one for licensed practical nurse (LPNs). This course focuses not only on the development of knowledge and skills, but also on implementing the acquired knowledge and skills (Adriaansen & Frederiks, 2002). The test consists of three domains, namely principles of palliative care, pain and symptom management and psychosocial and spiritual care.

The supervisors of course participants were informed at a preparatory meeting about the contents of the course and the expectation that they would serve as sources of information and as coaches. Course participants worked in both intramural and extramural settings; this meant that they could learn from each other's experiences in various work settings. There were at least two course participants from every ward, enabling them to support each other when applying knowledge from the course. The course comprised four 8-hour days (32 classroom hours) over a period of 2 months. It focused on a wide range of topics that emerged from the literature review on the needs of nurses: communication skills; pain and symptom management; dealing with palliative patients with a range of nationalities and ethnic backgrounds; bereavement and bereavement counselling; complementary care; ethical aspects of the final phase of life; and the use of humour as a nursing intervention. During the period between the classroom days, participants worked on specific assignments with the aim of making themselves visible on the ward and shaping practical projects to improve the quality of palliative care. After the series of classes was completed, students met for four 3-hour sessions in groups of five under the supervision of a lecturer; these sessions focused on reflection on the daily practice of palliative care, and on application of the knowledge and skills learned in the course to the actual work situation.

THE STUDY

Research question

The research question was: What is the effect of a posqualification course in palliative care for RNs and LPNs on the development of knowledge, insight and self-efficacy?

DESIGN

Effect measurement was undertaken, using a pretest/post-test quasi – experimental design.

INSTRUMENT DEVELOPMENT

Because it is so difficult to measure the effects of a course in palliative care on patients, we decided to develop an instrument to measure effects on course participants (Adriaansen & Van Achterberg, 2004). This consisted of two parts: an expertise and insight test (C-PCQN) and a Self-Efficacy Instrument for Palliative Care (SEP). The expertise and insight test has 36 questions to which the choice of responses is 'yes', 'no', of 'don't know', carrying scores of 1, -1 and 0, respectively. It is an expansion of the PCQN instrument developed and validated by Ross et al. (1996). The use of this test by baccalaureate students is also described by Arber (2001). In a pretest measurement, we found a reliability of Cronbach's α=0.71 (Adriaansen & Van Achterberg, 2004).

The self-efficacy instrument was developed specifically for palliative care. Self-efficacy is a construct that is used in social cognitive theory and involves the belief of an individual in their capabilities to perform at a desired level (Bandura, 1997). It is a domain-specific concept; this means that self-efficacy relates to assumed competency in a specific area, in this case palliative care. The SEP has18 items focusing on various aspects of palliative care. Respondents indicate the extent to which they believe they are competent with respect to these items by selecting responses that vary from 'I am very sure' that I am capable of..' to 'I am not at all sure that I am capable of..'. Scores vary from 1 (very sure) till 5 (not at all sure). The assumption is that a high level of reported selfefficacy (which corresponds with a low score on the scale) is related to adequate capability to organise and carry out activities. The SEP may be a suitable instrument for measuring the outcomes of educational interventions (Murdock & Neafsey 1995).

In a pretest situation, we tested the validity and reliability of the SEP (Adriaansen & Van Achterberg, 2004). The Cronbach's α for RNs was 0.72 and that for LPNs was 0.93. The pretest indicated that the assumed competency of respondents did not correspond with results of the knowledge and insight test. There was little divergence between RNs and LPNs in terms of estimated

effectiveness, but scores on the knowledge and insight tests did differ between the two groups. In this test, LPNs attained lower scores than RNs, a result which might be expected on the basis of their lower level of education. The knowledge and insight test and SEP may measure different dimensions of learning outcomes (Murdock & Neafsey, 1995). It is, therefore, important to use both in a post-test situation to obtain more information about validity and reliability.

METHODS

The first measurement took place before the course and the second took place after the fourth supervision session. There were 4 months between the first and second measurements. In addition to these two experimental groups, two control groups of RNs and LPNs were established. The expectation was that positive effects, both with respect to the knowledge and insight test and the SEP, would be greater for course participants than non-participants. The positive effects of the course would be shown by a higher score on the knowledge and insight test and a lower score on the SEP.

The course was delivered twice, once for RNs and once for LPNs. These nurses were invited by their immediate supervisors to take part in the course because they had worked with palliative patients for many years of and were available to attend. The LPNs were employed in nursing homes and home care services; the RNs worked on wards at general hospitals and in home care services.

The two control groups comprised LPNs and RNs, all of whom did not undertake the course. The LPN control group was set up using the snowball method: course participants were asked to invite a colleague with the same characteristics as themselves in terms of age and work experience. The control group of RNs was chosen by the head nurses of similar hospital wards and of home care service in two other districts.

ETHICAL CONSIDERATIONS

Ethics committee permission was not necessary because the research did not involve patients. All participants were informed about the study and their rights to anonymity, confidentiality and non-participation, and they gave informed consent.

DATA ANALYSES

Postcourse scores on the SEP and knowledge and insight test were the primary variables of the study. These were analyzed using analysis of covariance with main factor participation and covariates baseline score and type of nurse. In a preliminary analysis, it was verified that there was no evidence that the effect of

the course differed between the types of nurses (interaction tests: P>0.20). If a statistically significant effect of participation on one of the primary variables was found, the analysis was repeated for the subscores.

In a secondary analysis, postcourse scores on SEP and knowledge and insight test were analyzed separately for each type of nurse. Analysis of covariance was carried out with factor participation and covariate baseline score. As there was no evidence that the outcomes for the two types of nurses differed in a statistically significant way, the results of this analysis should be considered purely explorative. P-values of less than 0.05 (one-sided) were considered statistically significant. Two-sided 90% confidence intervals were calculated.

RESULTS

At the pretest, the SEP and the C-PCQN were administered to 57 RNs. Data from 19 (33%) of these were unusable because they were not tested a second time. To determine whether this group of 19 dropouts differed from those who completed he research project, results on the knowledge and insight test and SEP were compared using an independent samples t-test. No difference was found on the knowledge and insight test (mean score for completers = 14.5, sd. 5.1; mean score for non-completers = 13.8, sd 5.3; P = 0.83). However, there was a significant difference on the SEP (mean score for completers = 48.7, sd 7.9; mean score for non-completers = 43.5, sd 8.4, P = 0.03). Thus, RNS in the completers group had less positive scores for estimated self-efficacy than the dropouts.

In total, 50 LPNs participated in the first measurement of knowledge and insight (C-PCQN), of whom 37 took part in the entire study (74%). Of these LPNs, 23 participated in the course (experimental group) and 14 did not (control group). To determine the possible differences between participants in the study and non-participants, an independent samples t-test was conducted. The mean test score for completers was 11.9 (sd 4.2) and for dropouts 12.5 (sd 4.3). This means that there were no significant differences in this regard.

In total, 43 LPNs took part in the first administrations of the SEP (23 course participants and 20 course non-participants). For the second measurement there were 18 participants (experimental group) and 10 non-participants (control group); therefore 28 individuals took part in both the first and second measurements (see Table 1).

Table 1:   Characteristics of the respondents

	Measurement 1	**Measurement 2**
Registered Nurses C-PCQN	N=57	Course participants (n=15); control group(n=23); dropouts (n=19)
Registered Nurses SEP	N=57	Course participants (n=15) ; control group (n=23); dropouts (n=19)
Licensed Practical Nurses C-PCQN	N=50	Course participants (n=22); control group (n=15); dropouts (n=13)
Licensed Practical Nurses SEP	N=43	Course participants(n=18); control group(n=10); dropouts (n=15)

Mean SEP scores of the completers (n=28) did not differ significantly from the mean scores of the dropouts (n=15). Completers had a mean of 46.1 (sd 7.5) and the dropouts had a mean of 48.2 (sd 12.8) (P = 0.5).

Both the RNs and LPNs were characterised by maturity and many years of nursing experience. The mean age of RNs was 37.6 years and the mean age of LPNs was 37.1 years. RNs had an average working experience of 8.7 years; the average working experience of LPN's was 8.3 years.

Covariance analyses showed that participation in the course had an effect on scores from both the knowledge and insight test and the SEP (see Tables 2 and 3).

Table 2:   Results of the self-efficacy test for palliative care (SEP) and
            the knowledge and insight test (mean, SD)

	Course participants			Control group	
	measure-ment 1	measure-ment 2		measure-ment 1	measure-ment 2
Self-efficacy *total group* (n=33) RN (n=15) LPN (n=18)	47.3 (8.3) 50.7 (9.6) 44.6 (7.3)	42.5 (6.6) 41.7 (5.2) 43.3 (7.7)	Self-efficacy *total group* (n=33) RN (n=23) LPN (n=10)	48.5 (7.4) 48.4 (7.4) 48.7 (7.3)	46.2 (5.7) 45.6 (4.9) 47.5 (7.6)
Knowledge and insight test *total group* (n=27) RN (n=15) LPN (n=22)	10.3 (5.1) 12.9 (5.9) 8.6 (4.5)	14.6 (3.9) 16.4 (2.2) 13.5 (5.0)	Knowledge and insight test *total group* (n=30) RN (n=15) LPN (n15)	10.5 (3.8) 12.6 (4.7) 8.4 (2.9)	13.1 (5.6) 15.7 (4.2) 10.4 (6.9)

Table 3:   Results of the analysis of covariance

	P-value	Effect of course participation	90% Confidence interval
Self-efficacy	0.02	- 3.8	- 6.8, - 0.9
RN	0.02	- 4.7	- 8.2, -1.2
LPN	0.13	- 3.7	- 9.1, 1.8
Knowledge and insight test	0.03	2.0	0.0, 3.7
RN	0.26	0.7	- 1.1, 2.6
LPN	0.04	3.0	0.2, 5.8
Basic principles	0.28	0.5	- 0.5; 1.0
Symptom and pain	0.03	1.7	0.3, 3.1
Psychosocial care	1.0	0	- 0.8, 0.8

Scores on the knowledge and insight test showed an improvement (2.0; 90% CI 0.0, 3.7, P = 0.03). The effects of the course seemed to be mainly located in the cluster of variables relating to pain and symptom management (1.7; 90% CI 0.3, 3.1, P=0.03)

The effect of the test was 0.7 (CI –1.1, 2.6, P = 0.26) for RNs and 3.0 (CI 0.2, 5.8, P = 0.04) for LPNs. As this difference was not statistically significant (interaction test: p>0.20), it was difficult to decide whether this apparent difference is real or a chance finding.

For self-efficacy an improvement of –3.8 (90% CI –6.8, -.0.9, P = 0.02) was found. The effect was –4.7 (CI –8.2, -1.2, P = 0.02) for RNs and -3.7 (CI –9.1, -1.8, P = 0.13) for LPNs. Again, as the difference was not statistically significant (p>0.20) it may be a chance finding.

RNs in the participant group mainly showed greater improvement on the SEP, and the LPNs tended to show greater improvement on the knowledge and insight test.

DISSEMINATION IN PRACTICE

Besides providing knowledge and insight to individual course participant, the course focused on dissemination of this knowledge and insight in practice. This included a number of reflective meetings focused on becoming aware of one's own attitudes and alternatives for action, in relation to not only individual patients but also to implementing changes in practice. In addition to taking a test, course participants (LPNs and RNs) were, therefore, asked to complete a number of assignments. The acquired knowledge and skills could be demonstrated in these assignments, and participants could display their acquired competencies in their ward environments. RNs were given an assignment asking them to discuss the theme 'The quality of palliative care on the ward' during a team meeting and to develop criteria on the basis of which the quality of palliative care could be evaluated. This generally led to awareness that the care should be improved, not only with respect to direct patient care, but also concerning the communication within the multi-disciplinary team.

For most course participants, pain management turned out to be a problem. This was because there were no clear standards for pain management, pain was difficult to measure (despite the presence of pain measurement instruments), physicians persisted in using an "if required" prescription policy, or because the patients themselves were afraid of addiction. One of the assignments (a plan to improve pain management regime) therefore included verbal information transfer, consultation with the medical team and pain consultant nurse and agreements regarding on use of a pain assessment form. For the theme of symptom management, measures were proposed such as providing a reading table, a subscription to a periodical for palliative care, regular case discussions, appointing a primary nurse and professional support. During the reflection meetings, course participants discussed the structure and content of the implementation plan and any problems they might have encountered during its implementation. During these discussions, they felt that they were supported by the other course participants and that an adequate approach was discussed under the supervision of a teacher.

LPNs were given the assignment (with the assistance of a supervisor or head nurse) of developing a clinical teaching about palliative care where they were required to work out one aspect in detail. A few chose the theme of complementary care, where they demonstrated how nurses could use relaxation techniques and how relaxation massage could be given. Others asked a guest teacher to give a class on the effects and side-effects of morphine when used for pain control. LPNs who worked on a ward for older mentally ill patients demonstrated the use of massage with oils for relaxation purposes.

An important theme during the reflection meetings was how LPNs might make time available specifically for palliative care. A number of institutions did not offer this opportunity. Using the example of an institution that provided two course participants with a number of hours per week on the ward for palliative care, the reflection group outlined a strategy with the help of the teacher. This resulted in other institutions also offering course participants the opportunity to pay specific attention to palliative care patients for several hours per week. Moreover, LPNs discussed a number of complex palliative care patients and learned to present these appropriately during a team meeting.

DISCUSSION

The SEP showed that there was increased competency with respect to palliative care in general. The improvement on the SEP achieved by course participants paralleled improved scores on the knowledge and insight test. Improvements seemed most prominent in the area of pain and symptom management. A positive correlation between scores on the SEP and the quality of care (Murdock & Neafsey, 1995; Ford-Gilboe et al., 1997) could indicate that there was an increase in the actual skills of the RNs who took the course.

Various activities were undertaken on the ward by course participants in the areas of pain and symptom management and complementary care. In practice, they were confronted with many problems in these areas; this finding is in accordance with the need for additional education that emerges prominently from the literature. The emphasis on complementary care arises form unfamiliarity with this them. For many course participants, the possibility of using this kind of intervention was entirely new, and this stimulated them to discuss the newly squired skills (for example, in massage) with their co-workers. Finally the reflection meetings contributed to a better understanding of patient problems

If conditions on the ward are not ideal, course participants (especially LPNs) have only limited opportunities to implement changes; therefore, it is especially important form them to involve their supervisors when attempting to introduce innovations in care.

It is difficult to generalise the study results because of the small number of Registered and LPNs involved. However, the completers (RNs as well as LPNs) for whom a second measurement was available were comparable to the dropouts, with the exception of the SEP scores of the RNs. Non-completers here scored significantly lower than completers; dropouts felt more competent than the completers.

Moreover, we used a convenience sample, which may have distorted the results. In particular, the selection method for the control group of LPNs that might have positively affected the results on the knowledge and insight test because these LPNs might have worked on the same wards as the LPNs in the experimental group. It is, therefore, quite possible that this group was contaminated. However, if there is any bias, the observed effect was an

underestimation. The course participants were given the assignment to disseminate the results of the course on the ward (for example, by means of clinical teaching). As a result, LPNs from the control group acquired additional knowledge about several topics.

Generally speaking, SEP scores were probably affected positively by the practical experience of the RNs and LPNs who, because of many years of experience, expected to be competent in palliative care. Ford-Gilboe et al. (1997) found that performance had the greatest effect on the expectations of course participants regarding their own competency. In particular, LPNs estimated their competency very positively before the course (they even exceeded the RNs), although they scored lower on the test itself. Non-parallel progression of results on a knowledge test and a SEP was also described by Murdock & Neafsey (1995) whose explanation was that each instrument may tap a different dimension of learning outcomes. However, in our study RNs indicated that they began to feel more competent after taking the course, while LPNs achieved virtually the same scores before and afterwards. Another reason for the positive scores of both LPNs and RNs possibly lies in the structure of the instrument itself. If a respondent has filled in a number of positive assertions at the beginning of the test, there may be a tendency to repeat this pattern as the test goes on.

It is possible that in our study the LPNs became more careful in estimating their competencies after the course, which resulted in them evaluating themselves as virtually the same as before it. Another explanation might be that these scores are the results of a ceiling effect of the scale. For that matter, the scores on the SEP appear to be in conflict with the findings in the literature, where RNs indicated a need for education about a number of themes in palliative care because they felt inadequately prepared (Samaroo, 1996). However, these themes are more generally formulated than the specific items on the SEP; consequently it is possible that the nurses in our study felt more competent with respect to various specific items, but less competent with respect to the whole.

The SEP turned out to not to be a suitable instrument for showing differences between RNs and LPNs. This is because both categories appeared to include their own situation (education, experience, working conditions) in the evaluation, and because their work experience was based on the same type of experience, i.e. working with palliative care patients. Murdock & Neafsey (1995) did find differences between several categories of RNs, but these had experience with various categories of patients.

CONCLUSIONS

Despite of the limitations of the study several findings have implications for the education of nurses in palliative care. Postqualification programmes should provide adequate opportunities to acquire skills in pain and symptom management. Reflection sessions in which participants have opportunities to work through their experiences with dying patients, and to get support show their increased competencies on the ward, are of great importance. The organization must be willing to support qualified nurses to implement these skills.

More research is needed to gain insight into the effects of education on the quality of care and on the quality of life of patients receiving palliative care.

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Chapter 8

Decentral implementation of a centrally developed curriculum palliative care for nurses

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ABSTRACT

Aim: This article describes the implementation of a centrally developed palliative care curriculum for 17 Bachelors programmes in nursing (HBOV).

Method: A questionnaire has been sent to representatives of the HBOVs with questions focusing on the content of the currently used palliative care curriculum and the use of a recently developed curriculum palliative care.

Result: In most of the curricula, palliative care is integrated into the first two basic years of the training programme with a course duration of 20 hours or less. Palliative care is moreover an optional part of the differentiation-phase of the programme directed on general care and community care. The centrally developed curriculum is used at four HBOVs only; at half of the HBOVs the curriculum is not recognized. In the remaining HBOVs no use is made of the centrally developed curriculum because they have recently developed a curriculum of their own. However, 35% of the respondents are dissatisfied with the attention for palliative care in their curriculum. None of these HBOVs makes use of the centrally developed curriculum.

Conclusion: Still only little attention is paid to palliative care at the HBOVs, the centrally developed curriculum hardly plays a part. With regard to the implementation of the central curriculum more attention should be paid to the local implementation process.

INTRODUCTION

This article describes the implementation of a centrally developed curriculum palliative care for Bachelors programmes in nursing (HBOV). Palliative care is seen in The Netherlands as general, non-specialised care. (Janssens & ten Have, 2001; Francke & Willems, 2000). In this almost always a nurse is involved. To prepare nurses for this type of care sufficient attention has to be paid to palliative care in the initial study programmes in nursing.

In higher professional education (HPE) professional competences are directive for the curriculum content. This is characterised by each study programme having a large degree of autonomy with regard to the specific shaping of the curriculum.

The nursing profession at HPE-level has been described in a clear professional profile (Pool et al., 2001) and is moreover firmly embedded in the BIG1 Act. The competences and roles with regard to palliative care in the HBOV-curriculum are especially based on these professional competences, for the content of which use has been made of the European guidelines with regard to education for nurses in Palliative Care (De Vlieger et al., 2004). Starting-point are the five roles of the HPE-nurse: care-provider, casemanager, designer, coach and professional.

On the initiative of the Ministry of Public Health, Welfare and Sport a special development programme palliative care went ahead in 1998 with promotion of expertise of professional workers of different disciplines as one of the areas of special interest, apart from structural adaptation and needs planning. (Ministry of VWS, 1996). One professional university was then given the assignment to develop a palliative care curriculum for HBOV, which then would have to be distributed widely.

Although an intention has been formulated into implementation by the Ministry of VWS (De Korte-Verhoef, 2004) until now central monitoring has been lacking. Two years after publication of the curriculum (2006) it was investigated how much attention is paid to palliative care by the HBOV-programmes and in how far the newly developed curriculum is a part of this. The results of the research are described in this article.

CURRICULUM DEVELOPMENT AS INNOVATION

Because we take the developing and implementing of a palliative care curriculum within the HBOVs as an educational innovation in The Netherlands, we have investigated which factors play a part in the implementation. We consider this innovation successful when substantial components of the developed curriculum are actively used and have been embedded in the curriculum of the HBOV concerned to the satisfaction of the users (lecturers and students). The ultimate

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[1] The Dutch abbreviation BIG stands for Professions in Individual Healthcare.

goal of the curriculum, i.e. an improvement of the quality of the palliative care itself, is not taken into consideration.

As the assignment for curriculum development has been given to one of the professional universities with the intention of having this curriculum used by all study programmes, with the exception of this specific HBOV, an external central innovation is involved. This type of innovation may cause discongruence, if the proposed methods do not fit in well with the curriculum of the separate study programmes or when curriculum components have a high degree of standardisation with little flexibility, thereby thoroughly disturbing a structure in the existing curriculum. Discongruence also develops when the prevailing view in an institution's culture is that innovations from outside are seldom suitable (Van Linge, 2006). So to prevent discongruence extra attention has to be paid to the applicability of the central design of the palliative care curriculum in the context of the already existing curricula at the different professional universities.
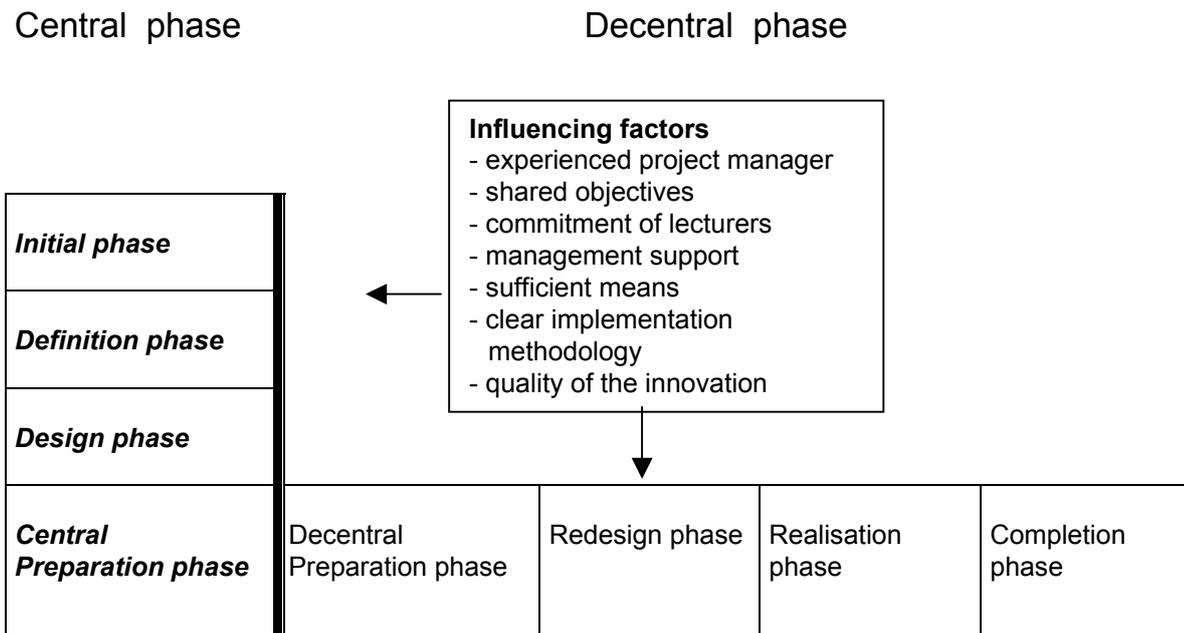
Implementation models were looked for that are useful for the prevention of discongruence. In our research we have opted for the six-phases model of Kor and Wijnen (2005) as it represents in greatest detail the development of the innovation. This model makes it possible to distinguish a number of specific characteristics. The original model has been adapted for this innovation, as it is a combination of an external central development and an internal, decentral implementation (see figure 1).

In the central phase the curriculum is developed on the basis of requirements specifications in which the taking HBOV-programmes are as much as possible involved. The central phase consists of four phases, i.e. the initial phase, the definition phase, the design phase and the central preparation phase. A central project manager is responsible for passing trough this phase well.

The decentral phase also consists of four phases, i.e. the decentral preparation phase, the redesign phase, the realisation phase and the completion phase. In the decentral preparation phase for each separate study programme a responsible person must be appointed who directs the innovation implementation decentrally; for this adaptation to the local conditions is advisable to reduce the discongruence.

Both during the central and the decentral phase a number of factors are at issue, influencing the success of the implementation (Rogers, 1995; ETEC, 2005; Van Linge, 2006; Grol & Wensing, 2006). During the decentral phase the lecturers involved assess the complexity of the innovation, the possible link-up with what is already there and the possible advantages one sees (Rogers, 1995).

Figure 1   Implementation model based on Kor & Wijnen, 2000)

Central phase   Decentral phase

	Influencing factors			
Initial phase	- experienced project manager - shared objectives			
Definition phase	- commitment of lecturers - management support - sufficient means			
Design phase	- clear implementation methodology - quality of the innovation			
Central Preparation phase	Decentral Preparation phase	Redesign phase	Realisation phase	Completion phase

CENTRAL PHASE

In the initial phase literature search was undertaken into needs of patients and nurses in the field of palliative care (Steinhuser et al., 2000; Duhamel & Dupuis, 2003; Singer et al., 2003). On the basis of this a project proposal was written including the rough set-up of the curriculum.

In the definition phase the substantive starting-points of the curriculum were determined.

During the design phase the different curriculum components were developed on the basis of the requirement specifications (see appendices 1 and 2). During the phase of central curriculum development especially the factors of 'experienced project manager', 'commitment of lecturers' and 'clear and shared objectives' played a part. It was important to pay attention to the motivation and commitment of lecturers and the sharing of objectives, as lecturers can be seen as professionals having great control over form and content of the education. In order to increase the involvement and share the objectives four lecturers with expertise in the field of palliative care were invited to take part in a brainstorming group.

During the central preparation phase representatives of all HBOVs were invited for a conference giving information on the new curriculum. Besides the release of the Cd-Rom with the curriculum was announced in a publication in a Dutch educational magazine (Adriaansen et al., 2003). Next the new curriculum was offered to all department managers of the HBOV-programmes with the request to pass it on to their central curriculum committee or to the palliative care expert of their study programme to make the transition to the decentral preparation phase easier.

DECENTRAL PHASE

The decentral phase involved the implementation of the curriculum at the different HBOV-programmes and reducing possible discongruence. Each HBOV has its own structure regarding the implementation of new curriculum components and a high degree of freedom in the design of the education; the new curriculum has to be shaped in such a way that it fits in with the structure. By paying attention to these aspects the resistance against an innovation that has not been invented by the users themselves is reduced (Rogers,1995).

In the decentral preparation phase the content of the new curriculum would have to be fitted in with the specific curriculum structure of the study programme, e.g. via a curriculum committee. The chairman of the curriculum committee or a specially appointed expert was seen as project manager with the task of structuring and facilitating possible use of the new curriculum.

To give room to the professional interpretation, the study programmes were free to adapt in the redesign phase components of the proposed curriculum in such a way that they could be fitted in with their own curriculum. In the realisation phase new components had to be actively realised and evaluated. On the basis of these evaluations adaptations had to be realised after which the curriculum component might be given a definitive place.

RESEARCH QUESTION

The general research question with regard to the present palliative curriculum within HBOV-programmes and the use of the centrally developed curriculum can be distinguished in four subquestions:

- In how far is attention currently paid to palliative care in the curriculum of the HBOV and to what extent leads that to satisfaction?
- To what extent is the new, centrally developed curriculum palliative care used?
- Which factors have influenced the use of the curriculum?
- When (a part of) the centrally developed curriculum has been implemented: in what way did this take shape?

METHOD

In order to answer the research questions a questionnaire was developed consisting of several parts (see appendix 3). The first part focused on a general inventory of the content of the palliative curriculum as offered within the HBOV-programmes two years after the publication of the new curriculum. Here

respondents could indicate how many hours and in which phase of the programme attention was paid to the theme of palliative care and what literature was used.

Next was asked after the use of the components of the new centrally developed curriculum. Two questions referred to possible reasons for not using the new curriculum. The answer choices given were derived from the influencing factors mentioned in the literature (ETEC, 2005). Moreover we asked after measures that could have been taken to promote use of the newly developed palliative care curriculum. A final question focused on the satisfaction about the attention to palliative care in the present curriculum. With all questions it was possible to give an answer of one's own.

In order to further analyse 'best practices', interviews were held with contacts of study programmes that were at least in the final implementation phase, i.e. the realisation phase or the completion phase.

RESULTS

Palliative care in the HBOV curriculum
Of the 17 HBOV-contacts 100% has completed the questionnaire. In the study programmes involved palliative care turns out to be both a component that has to be followed compulsorily by each student and a theme that can be chosen within a certain differentiation or at the request of the individual student.

With 11 study programmes themes within palliative care are compulsory for each student, usually integrated into a module focusing on general healthcare (AGZ) and/or a module focusing on public healthcare (MGZ). These modules are offered in the foundation year and/or in the second year of the programme (main phase 1). One study programme has a separate compulsory module palliative care of 40 hours. With 4 study programmes palliative care cannot be distinguished separately in the first two years of the programme; palliative care as distinguishable unit has been localised with these programmes in the differentiation phase.

In the third and fourth years of the programme (main phases 2 and 3) the theme is mainly offered as component of the differentiation AGZ or MGZ. One study programme offers the opportunity to follow palliative care as component of the differentiation psychiatry and mental health (GGZ).

When more expertise in palliative care is required in view of the specific work-placement situation or project assignment, the student can sometimes choose from an individually fitting offer. One study programme offers an international theme week palliative care in cooperation with a Belgian study programme. Another study programme has an optional module palliative care within GGZ.

The choice of literature links up with the above-mentioned angles. In the foundation year and main phase 1 students use specific chapters with regard to palliative care in more general nursing and medical literature. In the differentiation

phase there is more emphasis on primarily Dutch-language readers and students are expected to look up specific articles and use relevant websites themselves.

Table 1:   Current curriculum (n=17)

	Integrated into AGZ and/or MGZ modules	Option within AGZ differentia-tion	Option within MGZ differentia-tion	Option within GGZ differentia-tion	At the request of the student (during theory or work placement)	Separate module in basic programme
Amount of study load hours spent on palliative care	2x <10slh* 9x 10-20 slh	2x < 20slh 4x 20-40 slh 1x 80slh 1x 140 slh	1x 8 slh 3x 20 slh	1 x 40 slh	7x theory 1x practice (hospice) 1x exclusively at request**	1 x 40slh 1x international theme week
Phase of the study Program-me	Foundation year and main phase 1	Main phase 2 and main phase 3	Main phase 2 and main phase 3	Main phase 2	Main phase 2 and main phase 3	Main phase 1 Main phase 2

* slh=study-load hour

** this study programme does not have a compulsory programme palliative care

Application centrally developed curriculum palliative care
Three of the seventeen professional universities used the newly developed curriculum wholly or partially; they were in the realisation phase and the completion phase (One study programme used the Cd-Rom with the centrally developed curriculum exclusively as learning source for the student with an individual option. We considered this study programme as part of the redesign phase).

In a number of cases (8x) the central preparation phase had not been followed by the decentral preparation phase because the department managers had not passed on the Cd-Rom to a specialist lecturer or to a curriculum chairman. Five professional universities indicated to be familiar with the existence of the Cd-Rom with the new curriculum, but had opted for not using it.

Table 2:   Implementation phase

Central preparation phase	Decentral preparation phase	Redesign phase	Realisation phase	Completion phase
47% (8x) not familiar with existence Cd-Rom	29% (5x) after consideration no use of Cd-Rom	6% (1x) exclusively use as learning resource at request of the student	12% (2x) partial use	6% (1x) complete use

The reason for not using components of the centrally developed curriculum while one did know it, was especially indicated to be that the study programme itself had already developed suitable education in this area. Two times the explanation was given that palliative care was only a marginal theme in the curriculum.

To the question what would have contributed to better use of the centrally developed curriculum the respondents mentioned as external factors especially more personal explanation by the developers and more publicity. With regard to the quality of the innovation four respondents believed it should be better applicable. As internal factors lack of time and direction were mentioned several times.

Table 3:   Motives for use and degree of satisfaction

Reasons for non-use		Incentive to more use		Degree of satisfaction about present curriculum
Did not know of existence	7x	More publicity	7x	Dissatisfied: 6x (35%) 6x no use Cd-Rom 4x reason unfamiliarity
Developed own material	4x	Personal explanation:	6x	Reasonably satisfied: 8x (47%) 6x no use Cd-Rom 1x partial use Cd-Rom 1x use Cd-Rom as learning source
Not distributed	2x	Better applicability	4x	Satisfied: 2x (12%) 1x complete use Cd-Rom 1x no use of Cd-Rom
No priority:	2x	More available time	3x	
Lost	1x	More direction	3x	

Two study programmes indicated to be satisfied about their present palliative curriculum. One of these professional universities used the new curriculum wholly, the other had developed a curriculum itself. Eight study programmes were reasonably satisfied and six study programmes were not satisfied.

None of the dissatisfied study programmes made use of the new curriculum. These respondents explained their dissatisfaction by indicating that more attention

should be paid to palliative care and that the theme was underexposed at their study programme. Of the eight reasonably satisfied study programmes six (75%) did not use the and two (25%) partially.

With contacts of four study programmes that on the basis of the results of the questionnaire could be placed in the different phases of the decentral process a supplementary interview was held. With the study programme that developed the curriculum itself, the teaching committee was from the start of the project involved in the development. The committee had the authority to adapt and change the curriculum and had the intention to let the project succeed and apply the components as much as possible. For the multi-professional component (in which apart from nursing and physiotherapy the Faculty of Medicine was involved too) this only succeeded for a year, after that it was no longer organisationally possible to let the programmes involved participate.

One study programme was a member of the brainstorming group. The representative herself had discussed with the curriculum committee which components of the curriculum could be used. This committee has adopted her recommendations. The curriculum was mentioned as source of learning with the optional education. One study programme especially used the learning content and tutor manual with regard to the communication skills and the theme of symptom management as they fitted in best with the curriculum. They did not have the time to discuss thoroughly which parts were applicable.

One study programme indicated not to have a clear vision on the theme palliative care in the curriculum because attention was dependent on the individual choice of the student within the framework of the professional competences.

DISCUSSION

The view of several study programmes that palliative care is only a marginal part of the programme seems to contradict the view of the government, that finds it important that within the initial nursing programmes ample attention is paid to this subject.

The regular (compulsory) hours that are in the curriculum spent on palliative care, have usually been integrated into modules focusing on AGZ or MGZ. Only one study programme has a separate compulsory 40-hour programme. Integration into modules where several care categories come up seems to be legitimate, as palliative care does not limit itself to certain patient categories or clinical figures, but the risk of this is that too little attention is paid to the specific characteristics of this type of care. Only little attention is paid to palliative care in the mental health sector.

The palliative programme besides exists of optional modules; in a number of cases the student within the scope of the 'just in time information' pays attention to the theme when it fits in with his individual competence development. It is characteristic of competence-based learning that a curriculum links up with the student's individual learning needs (D'Andrea & Gosling, 2001; Cluitmans et al.,

2002), which go with a realistic context. This has an important motivational effect (Dick et al., 2005). However, in view of the importance of palliative care (Francke & Willems, 2000) this may create a dilemma when this context is lacking with the student and he hardly or not encounters palliative care at his work placement. When students themselves do not feel the need for deepening, they can generally restrict themselves to a minimum of 10 to 20 integrated hours, which is a narrow basis for the adequate provision of palliative care after the study programme.

The contribution of the newly developed curriculum palliative care to the present curriculum interpretation at the HBOV-programmes is only small. In the decentral preparation phase, where the transition from central to decentral would have to take place, little attention has obviously been paid to getting the decentral implementation process going with the different study programmes. Measures like the setting up of a brainstorming group, a conference, an article and the personal handing over to the department manager turned out to be insufficient. More publicity and personal explanation were often mentioned as strategies that would have made the transition from the central to the decentral preparation phase easier.

The key figures that have been chosen to get the implementation going, i.e. the department managers, have refrained from doing so in half of the cases. They did not recognise the importance of a centrally developed curriculum palliative care and did not consider the possible lack of an adequate palliative curriculum a problem or were not acquainted with this. The department manager has in none of the cases been directive in the successful implementation of the innovation, except for the professional university that developed the curriculum and where central and decentral linked up with each other perfectly. No extra time was made available and a clear implementation methodology was lacking, as a result of the absence of a decentral project manager. The innovation appeared to be little attuned to the current (sometimes brand-new) curriculum that prevailed, but in a number of cases it has not been investigated either whether attuning was possible. The lecturer as autonomous professional did not feel it concerned him. The degree of discongruence remained too large to enable the implementation of the innovation.

Van Linge (2006) observes in this respect that innovations are often implemented according to a rational structure approach, but that the success of such implementations is doubtful. Especially when the structure is characterised by a high degree of complexity, little standardisation, a strong degree of decentral decisions and many forms of communication such an approach is in fact not suitable. An HPE study programme has all these characteristics. Boon (2005) mentions that too strong structural direction demotivates professionals, as they do not feel involved in the innovation. Although little trouble has been taken to implement the centrally developed curriculum decentrally, only two programmes are satisfied about the present curriculum. The six dissatisfied programmes however, do not use the curriculum while it could probably have assisted in the further shaping of the palliative curriculum.

Currently little attention keeps being paid to palliative care in the HBOV curriculum, which does not lead to general satisfaction. However, the question

crops up whether the assignment of a curriculum to be developed centrally is still in keeping with an age where knowledge sharing via the Internet, competence-based learning, flexibility and e-learning are central (Teunis, 2006). One should much more aim for a form where HBOVs are invited to deliver their designs with regard to palliative care to an open learning environment that lectures and students can make use of according to their needs.

LIMITATIONS

The research especially focuses on the contacts of the HBOV-programmes, who in many cases appeared to be not familiar with the existence of the innovation. As the department managers who should have informed these contacts have not been questioned, the data give little insight into their motives in whether or not passing on the with the curriculum.

RECOMMENDATIONS

In a project application with regard to the central development of a new curriculum with the intention of applying this broadly, specific attention has to be paid to planning and realisation of the decentral implementation process. Apart from the employment of various forms of written and oral communication especially personal contact with lecturers with power of decision is important to bridge the gap between central and decentral and reduce discongruence

It has to be investigated whether the creating of a data base in an open learning environment where a diversity of curriculum components can get a place, is to be preferred. Then the emphasis in the implementation process would have to be much more on review and assessment of relevant supply and directing of the knowledge-sharing process via networking. This working method links up better with developments in higher professional education than the traditional central development methodology.

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Appendix 1

Planning requirements curriculum

For the design of an HBOV curriculum the following requirement specifications were started from:
- the curriculum content has to be based on problems and needs of palliative patients;
- the existing subject-matter description palliative care (drawn up by oncology nurses) is (also) starting-point for the curriculum;
- the curriculum content has to be based on the requirements that are within different settings (both AGZ and GGZ) set to nurses with regard to palliative care;
- to promote the implementation it has to be possible to apply the content flexibly within the different HBOVs, meaning that the components need to refer to a diversity of levels, course duration, settings, teaching methods and objectives ;
- the different components of the curriculum have to be competence-based;
- the subject matter has to be developed at three different levels (from introductory to advanced)
- except for theoretical deepening attention should also be paid to methodical reflection and moral attitude education.
- use of e-learning methods
- as palliative care is multidisciplinary the programme has to contain both mono-disciplinary and multidisciplinary components

Three levels can be distinguished:

1. familiarisation with palliative care; the emphasis is on the role of the care provider within the context of healthcare.
2. deepening of a specific care category takes place, elaborated for the roles of care-provider and director. Besides attention is paid to reflection.
3. apart from the competences with regard to care-provider and director in complex care situations, attention is also paid to the roles of designer, coach and professional worker. It is possible to deepen this multi-professionally.

Appendix 2

Curriculum content

The curriculum content consists of a number of components, focusing on 3 different competence levels:

- Level 1: organisation of palliative care, medium-complex practice situations, chronic pain and conversational skills with attention for one's own attitude with regard to death and dying and the bad-news conversation including study manuals, tutor manuals and presentations of lectures.
- Level 2: 40-hour modules focusing on GGZ, AGZ and practice situations in home care including manuals and reflection methodology, starting from Korthagen's circle.
- Level 3: complex casuistry and complementary care. Conversational skills focusing on psycho-social supervision. Multi-professional approach of palliative care and examples of final projects.

Appendix 3

Questionnaire
1. In which way is paid attention to palliative care in the curriculum HBOV of your programme (2004-2006) ?
    0   integrated in modules of general health care (AGZ) (for example a task in a module the elderly or clinical care), towards approximately .... study hours
    0   integrated in modules of mental health care (GGZ), towards approximately................. study hours
    0   integrated in modules of public health care (MGZ), towards approximately .... study hours
    0   as separate required module of .... study hours
    0   as separate optional module AGZ of .... study hours
    0   as separate optional module GGZ of .... study hours
    0   at the request of students during theoretical education
    0   at the request of students during their training period
    0   otherwise namely ....
2. In which phase of the curriculum HBOV is attention focused on palliative care?
    0   propedeutical period
    0   main phase 1 (second year)
    0   main phase 2 (third year) differentiation…
    0   main phase 3 (fourth year) differentiation…
3. Which literature is used for palliative care?
    0   specific book with the title….
    0   general nursing/medical book with some chapters concerning palliative care
    0   relevant internet sites
    0   reader with mainly Dutch articles
    0   reader with mainly international articles
    0   no specific literature, students individually explore internet sites and articles
4. Are you acquainted with the centrally developed curriculum palliative care, developed in 2003, by the University of Professional Education Arnhem and Nijmegen (HAN)?
5. Do you make use of parts of this in the current programme of the HBOV?
6. Are there any external parties involved e.g. an Integrated Cancer Centre in the development of (parts of) this curriculum palliative care?

    Can you give an indication of the use the following parts of the
7. Module general health care (AGZ): communication skills   yes/no
8. Teacher manual communication skills   yes/no
9. Module general health care (AGZ):
    task palliative care and symptom management   yes/no

10. Teacher manual concerning task palliative care
    and symptom management   yes/no
11. Optional module general health care (AGZ)   yes/no
12. Optional module mental health care (GGZ)   yes/no
13. Reflection   yes/no
14. Dissertation   yes/no
15. Multiprofessional module   yes/no
16. If you do not use the centrally developed curriculum, can you indicate why not?
    0   I do not recognize this curriculum
    0   My manager did not spread this curriculum
    0   My team-members did not spread this curriculum
    0   I know the curriculum but I do not know where it is now
    0   The content is not appropriate for our curriculum
    0   The content has insufficient quality
    0   The learning materials in this curriculum are too easy
    0   The learning materials in this curriculum are too difficult
    0   We just have a new curriculum and this Cd-Rom does not fit in this curriculum
    0   The theme palliative care has no priority at our HBOV
    0   Lack of time of lecturers who would have used the Cd-Rom
    0   I myself have sufficient expertise and the Cd-Rom offers no surplus value
    0   Within our team sufficient expertise exists and the Cd-Rom offers no surplus value
    0   There were recently many changes in our curriculum which were not in line with the content of this Cd-Rom
    0   I did not feel supported by the team or by the education commission to introduce the contents of this Cd-Rom
    0   I did not feel supported by the manager to introduce the contents of this Cd-Rom
    0   No one of the team felt responsible to introduce components of the Cd-Rom
    0   No one of the management felt responsible to introduce components of the Cd-Rom

17. Can you indicate what in your case would have contributed to a better use of the Cd-Rom (several answers possible)
    0 More publicity
    0 Personal explanation by the developers
    0 More appropriateness for our own situation
    0 More supervision of the educational commission
    0 More supervision of the manager
    0 More time to study and discuss the material within the team
    0 Better reputation of the developers
    0 More flexibility of the content
    0 Improved lay-out
    0 More adequate use of language
    0 Otherwise, namely……………
18. Are you satisfied with the attention which is currently given to palliative care in the curriculum HBOV?
    0 yes, very satisfied
    0 yes, fairly satisfied
    0 no, not satisfied, because…

Chapter 9

Findings and conclusions

INTRODUCTION

In this thesis we examined several aspects of education in palliative care for nurses and nursing students. In particular we focused on content of palliative care courses, measurement instruments that can be used, educational effects and implementation aspects.

PALLIATIVE CARE COURSES IN THE LITERATURE

Findings

In our review considering content and effects of palliative care courses for nurses as well as suitable measurement instruments to determine the effects we included 27 studies. We limited the inclusion criteria to include as much as possible relevant studies of sufficient quality from the period 1990-2005.

The diversity of courses concerned the topics as well as the number of hours that were devoted to various themes. The courses were focused on the following themes, i.e. communication, empathy, death education, pain and combined courses with a broad variety of topics. Frequently communication training included death education. All these themes were directed at general care.

In courses with a longer duration a mix of didactical methods was used: a combination of skills training, lectures, instruction and supervised reflection. Although palliative care is multidisciplinary in nature, only three of the 27 courses took such an approach. A positive effect was found in 21 studies; six of these 21 positive trails were studies with good quality designs where 15 had moderate designs. These effects referred to increased knowledge, better communication skills with regard to the identification of patient problems and the giving of support as well as the decreasing of fear with regard to death attitude.

The greatest effects on nurses were attained with a mix of teaching methods and a combination of multiple themes where, during a period of several weeks, these aspects were integrated with practical experiences that could be reflected on.

The outcomes of all the studies were defined at the level of the health care provider, additionally in seven of the 27 studies outcome measuring had also taken place at patient level. Various outcomes in patients were reported such as an increased degree of emotional and physical distress and a positive effect on patients' satisfaction.

Discussion

In courses for nurses a combination of methods was most effective. This outcome is supported by results in studies with regard to physicians and other health workers. Thompsom O'Brien et al. (2004), found that a combination of methods in communication training for health care professionals was the most effective approach. The benefits of an integrated approach providing communication skills courses as part of a broader course programme on palliative care were confirmed in studies amongst physicians (Klein et al., 2000; Fallowfield et al., 2002; Jenkins & Fallowfield, 2002). The studies of the review, which focused on death attitude

formation as an outcome were mostly part of broader communication skill training. In general it remains unclear if the successful courses also lead to positive effects in patients and to what extent the observed behaviors relate to health outcomes.

However, a certain degree of empathy at the stage of problem inventory can increase the distress level both in the care worker and in the patient. Individual satisfaction as a patient outcome must be considered with caution because patient satisfaction highly depends on personal needs and requirements (Carlson et al., 2005) and they tend to rate their satisfaction positively even in situations of poor assessment (Wilkinson et al., 2003).

A comparison of the effectiveness of the communication courses is difficult as the objectives differed per course. Both in the Bachelors degree programme and in the postgraduate education communication training for the benefit of palliative care should not only aim at the care for comfort, understanding and empathy, but also at systematic problem inventory and at aspects of clinical reasoning to come to a good diagnosis and thus connect biomedical and psychosocial aspects (Windish et al., 2005). Although palliative patients and their family have a great need for relevant information (Van den Zwaard et al., 2003; Voogt et al., 2005) this topic was not addressed in effect measurements in patients or simulated patients.

In this review studies were directed on traditional didactical methods, no studies have been found where computer-assisted instruction programmes have been researched by effects. They can be followed time and place-independently and proved to be successful with doctors (Hulsman et al., 2002). This type of course is particularly useful for registered nurses who have limited time to follow a programme in palliative care.

Although palliative care is multi-disciplinary care and it would be obvious that courses would have a multidisciplinary set-up, Zwarenstein et al. (2004) found in their meta- evaluation of the effects of palliative care no indications that an interdisciplinary approach would have more effect than mono-professional training.

MEASUREMENT INSTRUMENTS

Findings
In the measurement of effects of courses in palliative care a variation of instruments can be employed, which give insight into the different outcomes of palliative care education. In this thesis the psychometric qualities of three measurement instruments have been studied, namely a knowledge and insight instrument, the Comprehensive-Palliative Care Quiz for Nurses (C-PCQN), a self-efficacy instrument, the Self Efficacy instrument for Palliative Care (SEP) and an instrument to measure expressed empathy with, the Staff Patient Interaction Scale Palliative Care for Nurses (SPIRS-PCN)

To determine the sensitivity (as indication of validity) and reliability of the instruments we presented the instruments to a variety of groups of students for whom we expected variable outcomes (known groups method).

C-PCQN

The C-PCQN is an extension of the PCQN, an instrument of which the reliability and validity have been proved (Ross et al., 1996). This instrument can be used to measure knowledge and insight with and consists of three themes that are basic principles of palliative care, pain and symptom management and psychosocial and spiritual care. The 20 items of the original instrument which are directed at the clinical situation were extended with 16 items merely focused on home care. The scores for the newly developed items showed a high degree of accordance with the original items from the PCQN. The adapted instrument has an acceptable internal consistency of 0.71.

The test was presented to three different groups of respondents, i.e. student nurses, licensed practical nurses (LPNs) and registered nurses (RNs). As expected, LPNs scored lower on the test than RNs and nursing students, nursing students also scored lower on this test than RNs which is an indication of the validity of the test.

SEP

The SEP is an instrument that measures self-efficacy regarding palliative care. Self-efficacy can be defined as the judgement of the individual to be effective considering a specific expertise area (Bandura,1997). A self-efficacy instrument of good quality has to be specifically constructed for the situation. An expert panel has been involved in validating the instrument. An instrument of 16 items remained after removing four items due to the minor support of the expert panel and eight high scoring items (>80%) because these items did not have enough discriminative power. These items were primarily concerned with communication. This type of instrument has to meet the requirements of strength, generality and level (Bandura,1997). The SEP, due to its design of the answering categories, satisfies the requirement regarding strength (a five-point Likert-scale). The generality requirement is fulfilled with a description of a variety of situations and the level requirement is satisfied if the items have a varying level of difficulty. Because most of the communication items were removed the level of generality has decreased.

The test was presented to three groups of respondents with various educational level that is Bachelors students, RNs and LPNs. The score showed that there was little difference in assumed competencies between the groups. The test results of the C-PCQN for the LPNs, which were significantly lower than both of the other groups, were not in accordance with their opinion of their own competency.

SPIRS-PCN

The SPIRS-PCN is an existing instrument for measuring expressed empathy of palliative care nurses. In order to validate this instrument it was presented to five categories of respondents with different characteristics considering educational level, practical experience and religious orientation. In accordance with our expectations, students in the initial degree programmes had moderate scores on

the SPIRS-PCN (mean 40-50). Secular students tended to score lower than religious students and students with some clinical experience scored higher than students with no experience. The postgraduate palliative care nursing students scored significantly higher than the pre-registration students. The larger practical experience of students in a postgraduate programme had a positive effect on the level of empathy.

Two hypotheses were not confirmed, i.e. neither the educational level nor gender were positively correlated to SPIRS-PCN scores.

Discussion

The C-PCQN is a valid and reliable instrument that links up with the need to test an extensive field of knowledge relevant to nurses with regard to palliative care. This extent is necessary because patients are less and less bound to a clinical setting, and palliative care, dependent on the stage of illness and treatment also takes place at home and in outpatients' clinics. However, to measure the effects of a course in palliative care it is not sufficient to only use the C-PCQN, because even if increased knowledge is an important outcome it is certainly not the only effect that predicts the increasing level of competence in practice. For that reason this knowledge and insight instrument must be employed together with instruments such as the SEP and the SPIRS-PCN preferably completed with instruments that measure communication skills.

The SEP has been developed in the assumption that a positive self-efficacy level of the student is connected with acting successfully in practice. Efficacy beliefs are structured by experience and reflective thought rather than being a collection of specific self-beliefs (Bandura, 1997). The level of self-efficacy can be influenced positively by instruction and education, when in the didactical model modelling and feedback are included.

The score on the SEP prior to the course proved to be high. This seems to contradict the literature that shows that health care professionals consider themselves little competent to provide palliative care (Sellick et al.,1996; Fillion et al., 2005; Whittaker et al., 2006; Laurenson, et al., 2006). Moreover the score showed that there was little difference in assumed competencies between the groups with various educational level and may be caused by systematic over-estimation of LPNs regarding their own competency. This could possibly be related to a lack of self-perception and limited reflective capacity, connected to their modest educational background. Changes in a positive sense resulting from taking a training course, with many items that already score positively at baseline, is difficult to measure (ceiling effect).

Clearly it is important to also observe the behavior in practice in order to evaluate to what extent the results of the instrument are in accordance with their actual activities. This would increase insight into the validity of the instrument. Our results suggest that the instrument must be used with caution, although it is possible to measure progress after a course with the SEP.

It is assumed that by the use of the SPIRS-PCN, with statements clearly expressing feelings of a palliative patient, the students are maximally appealed to,

to show their empathetic capacity. This is in line with the finding that students in a situation with an emotionally charged role of a simulation patient achieve better than in a comparable situation, but with a less outspoken role (Razavi et al., 2000). The SPIRS-PCN can be distinguished from other instruments, as a wide range of answers scores positively, including e.g. giving information and explanation, presenting a solution and starting a discussion. Such answers however, do not score on other empathy measurement instruments that rather lay emphasis on the affective components of the concept of empathy (Reynolds & Scott, 1999; Hojat et al., 2005). Palliative patients however appeal to the cognitive aspects as well as the affective elements of empathy. They have a need to obtain ample information and to be able to handle their symptoms adequately but also to be listened to and to express their distress (Van den Zwaard et al., 2003; Voogt et al., 2005). So this test is pre-eminently suitable for measuring effects of empathy with palliative education.

The finding that the religious students scored higher on the SPIRS-PCN than the secular students is in line with findings on the relationship between religious orientation and empathy in other studies (Blomquist et al., 1980,\; Hoffman, 2000). The likely explanation that religious students are more advanced in their moral development due to the attention that has been placed on value development during their socialization process is confirmed by our findings (Olsen, 1997).

Factors such as education, religious orientation and practical experience influence the empathetic capacity (Reid-Ponte, 1992; Olson,1995; Winefield & Chur-Hansen, 2000; Hojat et al., 2002). These variables played a part in the research design where use was made of a convenience sample. The previously expected divergence between the groups with various education level did not occur because the age and inherent degree of maturation played a more important part than education. Our finding that the level of the initial degree programme (associate or Bachelors) did not appear to have any influence on the empathetic capacity of students can probably be attributed to the fact that the measurements of both the associate degree students and the Bachelors degree students took place at the beginning of their studies, a period during which both groups of students had similar characteristics regarding age and experience. This result is not in line with the findings of Layton & Wykle (1990), it might be possible that the divergence will appear after finishing the educational programme. This could be examined in follow-up studies.

Because the present study concerns students, maturation is inherent to education and is a consequence of clinical experience. Patient contact and observing competent colleagues during these contacts can have a positive influence on empathetic capacity (Olson, 1995; Branch, 2000). Because of the specific character of the sample there was an intense interaction of the factors level of education and experience.

The SPIRS-PCN inherently lacks the perspective of the patient. The patient has in the instrument only an initiating role (via a statement) and further does not

contribute to the interview. It is unclear how the patients would respond in reality to the statements of the nurse, but she has the professional responsibility to accomplish a meaningful therapeutic relationship and should not rely on the benevolence and ability of the patient to achieve a significant connection. For this reason the reply of the nurse must reflect the start of the relationship between nurse and patient.

EFFECTS OF THE COURSES

Findings
The effects of two palliative care courses for nurses were evaluated on two different levels, that is the Bachelors level and the postgraduate level. Both courses were developed to obtain palliative care competencies on a basic level (De Vlieger et al., 2004)

Bachelors course
The Bachelors degree programme in nursing consisted of theoretical modules (in which palliative care was integrated), a communication course directed at palliative care and practical periods with critical reflection in various settings. We used the SPIRS-PCN to measure the effects of the programme on the level of empathy. The empathetic capacity of student nurses increased as their study programme progressed. The scores of the students increased during the whole of the programme: during the theoretical modules, the communication course and after experience in practice

Postqualification course
The postqualification programme was a course in palliative care for RNs and LPNs (as is described in chapter two of this dissertation). The level and content of this course correspond with the level of a basic course according to the European competence profile of palliative care nurses (De Vlieger et al., 2004). In the course a variety of didactical methods appropriate for the theme has been used. To increase the level of self-efficacy of the students much attention was paid to positive feedback by the tutor. Reflection and supervision were important instruments for the students to support the implementation of the recently acquired knowledge and skills in clinical practice.

We used the C-PCQN and the SEP to measure the effects of the programme. The scores of the students improved, both on the C-PCQN and the SEP.

Discussion
The end scores on the SPIRS-PCN of the Bachelors students were similar to the scores of nurses in palliative care settings. (Yates et al., 1998; Hoffman, 2000). It is possible that an external factor such as maturation had an effect on the increase in empathy scores on the SPIRS-PCN in our study.

In their responses the junior students frequently reached for quick solutions and clichés to demonstrate their recently acquired knowledge, which according to

Benner (1984) is characteristic of novices. This could be related to the fact that they had just learned these solutions in the basic programme and that they were not yet capable of seeing things from the perspective of another individual.

The increase in empathy scores is not in line with the results reported for empathy development in physicians. According to various studies, empathy scores remained stable (Mangione et al., 2002) or even decreased during their study programme (Bellini et al., 2002; Hojat et al., 2005; Bellini & Shea, 2005). A possible explanation is that doctors feel more competent in the cognitive aspects of their professional qualifications when considering treatment; they perhaps focus on these characteristics during their encounters with patients at the expense of the affective and empathetic side.

It appears to be difficult to isolate an intervention in a Bachelors programme in such a way that it can clearly be shown as an influencing intervention. It is possible that individual educational activities such as a communication course cannot be distinguished in a four-year programme, in contrast with a more theme-oriented post qualification course.

The positive results of the C-PCQN and the SEP with the postqualification course indicate that there is an increase of knowledge, insight and self-efficacy with students. With the measurement prior to the course the SEP did not differentiate on group level. The finding that the scores on the SEP are increased after the course in concurrence with the scores on the C-PCQN is an indication for the appropriateness of this instrument on the individual level.

In the postqualification course we did not evaluate the effects of the communication skill training and the possible changes in the student's death attitude, although these indicators can be considered as important outcomes of education in palliative care. Also systematic effect measurement has not been performed at the work surroundings of the course participant (supervisors and colleagues) and the patient himself.

IMPLEMENTATION

Findings
The aim of the study was to determine the degree of decentral implementation of a centrally developed palliative care curriculum for HBOV-study programmes that should serve as golden standard, and the gaining of insight into the factors that played a part in this implementation. The developed palliative care curriculum was, in spite of attention for flexible application of the different components, only (partially) implemented with four of the seventeen HBOV study programmes. Half of the study programmes did not know the curriculum in spite of activities in the field of distribution. In research into the present number of palliative care lessons in the curriculum it turned out that in most of the study programmes integrated attention was paid to this theme in the elementary phase. There was more specific attention for palliative care during the differentiation phase where students focus on a specific area of healthcare.

At six HBOVs one was moderately or not satisfied with the present palliative care curriculum. None of these study programmes used the centrally developed curriculum. So the implementation does not seem to be hindered by a lack of need for a palliative care curriculum.

Better publicity and more personal attention of the developers of the central curriculum were mentioned most as factors that could have contributed to a better decentral implementation.

Discussion

The decentral implementing of a centrally developed curriculum is within higher professional education an almost impossible task, in view of the autonomy of the professional universities. With nursing study programmes the most directive element apart from the BIG-requirements is the professional profile. Within this professional profile roles and competences have been formulated; palliative care is described with the role of caregiver in a general sense as: 'to alleviate the burden of disease, handicap or dying, the nurse provides care in a professional way according to human ability' (Pool et al., 2001). This description gives neither in content, nor in size indications for a palliative care curriculum. Within the scope of the competence-based education, where within the framework of the professional profile the students are given the opportunity to develop a learning track of their own, it is moreover possible that individual students pay only little attention to palliative care. So it is important to keep looking for ways to make the study programmes aware of the need to pay sufficient attention to palliative care. An open e-learning context may therefore be more adequate than the method used now (Kanselaar et al., 2000; Jochems et al., 2004).

CONCLUSIONS

Contents

In palliative courses a mix of teaching methods, aimed at the increase of knowledge and insight, improvement of skills and development of an adequate death attitude is most effective. A short course or training of a few hours is especially suitable when a specifically defined behavioral change is aimed for, e.g. the use of a pain scale. When palliative education is approached integrally more time is necessary. Most effective is the opting for a structure where theory and practice alternate, so that what has been learned can be applied in a context-rich environment (Simons, et al., 2000).

Instruments

The modified PCQN, with items directed at principles of palliative care, pain and symptom management and psychosocial and spiritual care is a valid and reliable instrument that can be used with nurses who are educated on a basic level. In view of the content of the items this test can be applied especially in courses that refer to both the clinical environment and the outpatients' clinic and the home situation.

The SEP as an instrument for self-efficacy in palliative care meets the requirements of level and strength and to a lesser degree the requirement of generality as a number of items with regard to communication have been removed. The reliability and internal consistency are sufficient, the validity requires further exploration. It can be used to measure the individual progress in self-efficacy during a course in palliative care.

The SPIRS-PCN scale is a reliable instrument for measuring the expressed empathy and provides insight into the strengths and weaknesses of the empathetic capacity of the respondent. The instrument can be used in measuring the effects of training during the various phases of the study programme but also as an educational tool because the personal answers of the students give an indication of their level of competence.

Effects

The SPIRS-PCN was employed in the effect measurement of a Bachelors course for nurses, which investigated whether a course in communication skills and practical experience influenced the students' empathetic capacity. Students develop higher levels of empathy during a Bachelors degree programme in nursing. They reached scores which were comparable with the scores of experienced palliative care nurses The scores increased mainly after a communication training and after practical experience.

The C-PCQN and the SEP were used to measure the effects of a postgraduate course in palliative care. This course proved to be effective considering increased knowledge and insight and an increased level of self-efficacy in palliative care both for nurses and enrolled nurses.

Implementation

Although the government indicated the importance of attention for palliative care in study programmes for nurses little attention is paid to this theme within the HBOVs. The policy to lift the attention to an adequate level through development and implementation of a centrally developed palliative care curriculum did not go successfully due to a lack of appropriate actions.

RECOMMENDATIONS

Practice

Although many integral themes in the Bachelors degree programme for nurses on chronically ill care categories and people with cancer also have a palliative angle, it is in view of the specific nature of this care to be recommended to pay separate attention to this theme. Apart from palliative care as component of general care more attention should be paid to this kind of care in mental health care. A golden standard with regard to the content could be developed via a to lecturers and students easily accessible open course ware-site, where postgraduate courses could be placed too. This site can be managed by one or more accredited study programmes to assure the quality. They take care of maintaining the level and

updating of what is offered. Moreover support of implementation can be offered via this site.

The effects of courses are reinforced if there is attention for implementation in clinical practice of that which was learned in the course; this implies that the supervisors of the course participants must also be involved in postqualification courses.

It is of importance to create the opportunity between the course meetings to apply what has been learnt to practice and to reflect on the applying via supervision meetings (Rogers, 1995; Platzer et al., 2000; Branch, 2000). Although palliative care is of a multi-disciplinary nature the different professionals involved have a specific expertise. It has not been proved that multi-professional courses are more effective. This justifies in itself a mono-disciplinary angle of specific course elements where especially integrative case discussions are suitable for being held in a multi-disciplinary environment, both on initial and postgraduate level. As a high individual self-efficacy with regard to palliative care leads to better cognitive involvement and this can be influenced positively by one's own successful experiences, modelling and verbal encouragements (Bandura, 1997) these factors have to be deliberately employed in the didactic educational process, both in the theoretical part and in an organised reflection on practice. It is recommandable to develop an electronic data base with learning content in the field of palliative care that is easy accessible for teachers as well as students.

Research
With respect to further research into the effects of schooling in palliative care for nurses, we recommend that patients be involved more frequently in effect measurements. Moreover, the research should involve designs with control groups, consisting of health care providers who do not follow the course to get more indications about the effectiveness of the course as an outcome variable. More use should be made of valid and reliable measurement instruments to allow stronger proof of the effects of the courses themselves.

It is advisable to do more effect-evaluation studies with regard to palliative education where different outcome measures are of importance. In order to determine the level of these outcome measures with students several instruments have to be used. The ultimate goal is being able to form an opinion about the student's competences with regard to palliative care. It is desirable to design an assessment that knowledge, insight and self-efficacy assessment are part of, as well as the measurement of communication skills and death attitude. Moreover assignments can be formulated that aim at the application of what has been learnt to the work (placement) situation. The variation in the use of measuring instruments is promotive to the validity of the assessment. As framework the European competence profile for palliative nurses can serve, with three described competence levels (De Vlieger et al., 2004).

Possibly with the SEP an asymmetric answering scale with more positive than negative answering options should be opted for, making a differentiation of positive answers possible (Streiner & Norman, 2001).

In confirmation of the validity of the SPIRS-PCN the scores on this test should be compared with the acting of the nurse in a patient situation. To further investigate the assumption that empathy development is related to moral development, apart from SPIRS-PCN a validated test with regard to moral development, e.g. the DIT test (Duckett et al.,1997) would have to be held. To further research construct validity the SPIRS-PCN can be compared with other, more general instruments measuring empathy. A promising instrument is the Jefferson Scale of Physician Empathy (JSPE), that also proved to be suitable for empathy measurement with nurses (Fields, et al., 2004).

In the present professional profile at HPE level there are hardly any substantive directives concerning the content of the Bachelors programme. However, there is a number of topics of vital importance within this course, because these themes form the core of the profession. Palliative care is an example of such a topic. Not only because it is expected that every registered nurse is able to provide palliative care in various settings, and for this reason the training programme must pay attention to this type of care, but also because the achievement of relevant competencies strongly appeal to the development of profound knowledge, adequate communication skills and a reflective attitude. Moreover palliative care stimulates a multiprofessional approach which is crucial for the student to become acquainted with the core dimensions of the nursing profession. For this reason several standards concerning the content of the Bachelors programme must be formulated in order to achieve that every nursing student get acquainted with these crucial subjects.

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Summary

The subject of this thesis is the palliative care education to nurses and HBOV(Dutch Bachelors Degree Programme in Nursing)-students both on Bachelors and post-initial level. Palliative care is an approach improving the quality of life of patients and their nearest and dearest who are confronted with a life-threatening disease. In it attention is focused on the preventing and alleviating of suffering by means of early detection and careful assessment and treatment of pain and other problems of a physical, psychosocial and spiritual nature (WHO, 2002). The nurse plays an important part in this care process and is in the greater part of the cases involved in palliative terminal caregiving during the last period before death. She focuses on physical aspects such as pain and symptom management. She also plays a part in psychosocial counselling, where the starting-point is the linking up with emotional, social, spiritual and mental needs of the patient and his/her family. Besides nurses often have a coordinating role with regard to the fine-tuning of the caregivers and authorities involved in the often complex situation.

The demand for palliative care increases as more and more people die of non-acute diseases e.g. after cancer, a chronic disease or dementia. In the palliative phase the care is aimed at an optimal quality of life. The complexity of palliative care is determined by characteristics of the care situation itself and the way in which it is organised.

Nursing expertise with regard to palliative care can be given shape to on different levels. As palliative care is generic, each nurse should after the completion of an initial HBOV or MBOV (Upper Vocational Secondary Education in Nursing) palliative care programme be able to provide care on a basic level. Knowledge, attitude and skills to meet this basic level should be taught during the initial study programmes in nursing and short follow-up courses. The advanced level is intended for nurses working in specific palliative settings such as a hospice or a palliative ward in hospital or nursing home. This advanced level is achieved by longer-term courses at post-initial level. From nurses with a specialised level it is expected that they are able to provide complex patient care, give consultations and design new methods. This level is related to a Master's degree programme.

In this dissertation the education in palliative care is discussed from several angles. The studies with regard to study programmes in palliative care are aimed at study programmes at elementary and advanced level.

REVIEW

In a literature review (1990-2005) in chapter 2 an overview is given of the content and the effects of palliative courses for nurses. Twenty-seven studies were found that met the inclusion criteria and had at least an acceptable or qualitatively good design. The research questions of these studies referred to the content, the teaching methods used, the effects and the standards used with the measurements. In the review a distinction was made between five subsectors. It turned out that most studies focused on the effects of communication courses, and in a number of cases specific attention was paid to the results with regard to death

attitude and empathy. Moreover the review comprised several studies into the effects of courses in the field of pain in the palliative phase and studies have been found that focused on combined courses with different themes relevant to palliative caregiving. The greater part of these courses was aimed at application in general healthcare (both clinical and home care). Most courses had a mono-disciplinary set-up, although palliative care is generally provided multidisciplinarily. Of the 27 studies 21 show a positive effect with regard to one or more outcome measures such as improved knowledge, more adequate communication, an improved death attitude or the applying of a pain-scoring instrument.

Only 6 of the 21 studies had a design of good quality: randomised control with pre and post test and follow up, where use was made of valid and reliable instruments. Four of the studies referred to initial courses, only 3 studies had a multi-disciplinary set-up; with 7 studies apart from effects with nurses, effects with patients were measured too.

There is a clear tendency that a combination of teaching methods is most effective. In the field of communication attention should not only be paid to skills, but also to aspects such as death attitude and empathy. Also effective is a combined course with several themes where theory and practice alternate and attention is paid to reflection. The number of hours spent on the course of training differed, varying from a short instruction of one daily period focusing on a specific theme to courses of several days taking more than 100 hours. The greater part of the courses involved meetings of several days, where an increase of the number of extra hours did not always lead to more effectiveness.

COURSE DESIGN

In chapter 3 a substantive angle comes up for discussion. The content of a short, four-day course on palliative care for nurses on postgraduate, non-specialist level was described. The themes were developed on the basis of literature search into the needs of palliative patients and nurses. In the design the possibility of applying between times what has been learnt in clinical practice was taken into account. The course involved four times one day of education followed by four supervision meetings led by a teacher. The group of students consisted of nurses from various hospitals and from home care, who were employed on non-specialised wards or in non-specialised teams. This heterogeneous composition was based on the starting point that students having a different working environment might learn from each other. The course aimed at the development of knowledge, attitude and skills and involved subjects such as the context of palliative care, pain and symptom management, communication, spiritual care, complementary care, and dealing with dying in the various cultures. Use was made of various teaching methods, with feedback of the lecturer being aimed at raising the student's own effectiveness. Visibility on the ward is promotive to the support of colleagues and managers and so contributes to implementation. In the supervision meetings attention was therefore paid to strategies for bringing about changes on the ward, thus making it possible to apply what had been learnt.

MEASURING INSTRUMENTS

The third angle, described in chapters 4 and 5 is a methodological one. This involves the question which measuring instruments can be used to measure the effects of courses and palliative care curricula. These effects can be described in terms of a more effective performance of the nurse in the care of palliative patients and their family, with adequate pain and symptom management and good communication with the patient and his family feeling themselves heard. A knowledge and insight test can be employed to measure the increased knowledge and insight that are at the basis of more competent acting. An instrument to measure personal effectiveness with gives an impression of the perceived level of one's own effectiveness in palliative care and an empathy instrument is a reproduction of the level of expressed empathy, an important component in the communication process with the patient and his family.

First of all the developing of a knowledge and insight test based on the existing Palliative Care Quiz for Nurses (PCQN), developed by Ross et al. (1996) was described. This test focuses on three dimensions, i.e. 1. Principles of palliative care, 2. Pain and symptom management and 3. Psychosocial and spiritual care. The originally clinically-oriented test has been extended with a number of items with regard to the home situation and was tested in different groups, especially nursing students of a Bachelors degree programme, registered nurses (RNs) working in hospitals and in home care and licensed practical nurses (LPNs) working in nursing homes. Four items were removed, two of which where from the original instrument as they discriminated insufficiently. This resulted in a valid and reliable test of 36 items that is suitable for the Dutch situation: the Comprehensive Palliative Care Quiz for Nurses (C-PCQN). Seven items referred to basic palliative care principles, 22 items to pain and symptom management and 7 to psychosocial and spiritual care. The scores in the test with LPNs were lower when compared with that of RNs. Nursing students scored higher on more general items and RNs and LPNs had better scores in the category of pain and symptom management. This is an indication of validity of the instrument.

The degree of own effectiveness is positively correlated with the carrying out of newly-learnt behavior after a course or training and is influenced by positive feedback, modelling and instruction. A list with 30 items was designed and presented to palliative care experts; this resulted in a removal of 4 items that insufficient support was found for. The distribution of the level of difficulty was assessed as adequate. After this a changed list was presented to a heterogeneous group of students, RNs and LPNs on the eve of a palliative care course (n=157). This resulted in an 18-item list.

The internal consistency of the instrument, Cronbachs alpha, was 0.80. The average scores of the three groups of respondents almost agreed (RNs 47.2, LPNs 47.0 and students 49.6 on a scale of 0-80). Practice experience seemed to influence the scores in the test positively, irrespective of education. In comparison with RNs, LPNs expect almost as often as nurses to be successful in their actions

with regard to palliative patients, while the scores in the knowledge and insight test were significantly lower. Possibly they overestimate themselves systematically, just because of their practical experience. So the test has to be employed with some care and needs further validation for different target groups.

Chapter 5 focuses on a description of research into the psychometric qualities of an instrument for measuring empathy in palliative nursing situations. Empathy is seen as an important aspect of the communication in palliative care. In this we do not consider empathy as a quality only, but also as a skill that can be learnt by means of training and instruction. An existing instrument that seems to be suitable for measuring empathy is the Staff Patient Interaction Scale for Palliative Care Nursing (SPIRS-PCN). This instrument focuses on the stage of 'expressed empathy', aimed at an observable aspect of the communication between caregiver and patient. It is a paper and pencil instrument where the patient makes ten statements expressing anger, depression, isolation, care and suspicion. Investigated was the criterion-related validity, the homogeneity and the inter-assessor reliability by presenting the instrument to five categories of (student)nurses (known groups method). First-year students HBOV and MBOV with only little practical experience scored moderately in the SPIRS-PCN; as expected they scored lower than palliative nurses with several years' experience. The young age of both categories of students turned out to influence their empathic capacity more than their educational level. Sex/gender also turned out not to influence the degree of expressed empathy, which does not agree with results from earlier studies. The scores of religious students were higher than those of secular students, possibly because moral development plays a part.

The SPIRS-PCN proves to be a reliable instrument to measure the empathic capacity with. The results with regard to the validity of the instrument are not unambiguous, however.

EFFECTS OF EDUCATION

The fourth angle refers to two studies into the effects of education at initial (Bachelors) level and post-initial level. These are described in chapters 6 and 7.

Chapter 6 comprises an account of the empathy development of students in the Bachelors degree programme in nursing. The developing of empathy is influenced by factors such as maturation, sex/gender, practical experience and education. It was investigated whether the empathic capacity of two groups of students having a different programme order (HBOV-dual and HBOV-fulltime) would increase during their training and whether a training programme in communication and practical experience would have a positive effect on the scores of this empathy test. In this study the SPIRS-PCN was used to measure the empathy level in a time- series-design in four measurements during the study programme. The scores of the total group of students increased significantly as the study programme progressed from 44.7 to 56.4 on a scale of 0-90. The scores were influenced most by a course in communication skills (from 44.6 to 49.5) for the group of dual students and from 48.6 to 53.5 for the group of full-time students.

Practice especially influenced the scores of the dual students (from 53.4 to 57.4) However, improvement of the empathic capacity of nursing students could not exclusively be ascribed to a specific part of the Bachelors degree programme, but was influenced by the theory programme as a whole.

Chapter 7 describes a study into the effects of a postqualification palliative care course. The substantive accounting for the themes rests on a literature study into the needs of patients and nurses. The effects of the course were measured via a knowledge and insight test (C-PCQN) and via a self-efficacy instrument (SEP) in a pre-test/post-test quasi experimental design with convenience sample. The course was given to both RNs and LPNs and had a significantly positive effect on the knowledge and insight level of the total group of students with scores increasing from 10.3 to 14.6 in comparison with the scores of the control group from 10.5 to 13.1 (range 10-30). The level of own effectiveness too increased stronger with the students when compared with the control group. This resulted in a lower score in the SEP (from 47.3 to 42.5) on a scale from 0-80, in comparison with the control group (from 48.5 to 46.2). RNs booked more progress in the SEP (from 50.7 to 41.7) and LPNs achieved their most important improvement in the C-PCQN (from 8.6 to 13.5). The scores of the C- PCQN increased most in the field of pain and symptom management.

IMPLEMENTATION

The last angle, which has been described in chapter 8, is that of the implementation. Within the scope of a special-development programme of the government 'Palliative Care in the Terminal Phase', a programme that was aimed at innovation, structural adaptation, needs planning and promotion of expertise in palliative care, a palliative care curriculum was developed centrally by one HBOV for the Bachelors degree programme in Nursing (HBOV). It was intended to implement this curriculum as golden standard at all HBOVs.

This study was aimed at stocktaking of the number of hours that two years after the developing of the central curriculum was spent in the HBOVs on palliative care and at identification of factors playing a part with the implementation of the centrally developed curriculum palliative care.

It was concluded that in most HBOVs palliative care was offered integratedly during the first two years of the study programmes with a study load of 20 hours or less. In the differentiation phase students could usually opt for this theme when it interested them or when they thought their competences in the field of palliative care had to be supplemented in view of their work placement. So the total number of structural hours with regard to palliative care is only small; individually the number of hours followed can vary strongly.

Of the study programmes 35% was dissatisfied with the palliative care curriculum; none of these study programme used the centrally developed curriculum. The latter was only used by four HBOVs (partially). The implementation of the central curriculum can be regarded as unsuccessful, considering how little it was used in the different HBOVs. Two of the study

programmes used the curriculum themselves as learning source that students, led by their personal learning wishes, could make use of.

Factors that played a negative part are: too little interest of the education manager, too little publicity and too little personal attention of the developers.

Moreover the question is whether the central developing of a curriculum is the most suitable method for putting up a standard, while in competence-based education learning-sources have to be available for everyone in order to employ them flexibly. It seems to be much more adequate to create an open learning environment with a sound infrastructure.

In chapter 9 the findings are discussed and recommendations made for the future. Palliative care is comprehensive care which is not only limited to the last phase of life. The contents of courses in palliative care must be aimed at a variety of themes such as death attitude, development of empathy, communication, the assessments of patient problems, pain and symptom management and psychosocial counselling. It is recommended to combine these themes because with that the largest impact is reached. The effects are related to an increased level of knowledge and insight, improved communication skills and the development of a more adequate attitude. It is important to measure these effects with valid and reliable instruments, where patients must be involved more than until now.

The attention for palliative care on the HBOV is still only moderate, in spite of the desired implementation of the centrally developed curriculum. Possibly an electronic database that is accessible for lecturers as well as students is an adequate instrument, where frequent attention of the teaching staff is necessary to guarantee a minimum expertise level of the individual student. Palliative care is important not only in an educational programme for nurses since the need for this type of care has increased, but also because in palliative care all perspectives can be integrated which are important for the student nurse to become a nursing professional.

Samenvatting

Het onderwerp van dit proefschrift is een onderzoek naar inhoud, effecten en implementatie van het onderwijs in palliatieve zorg, zowel op Bachelors als op postinitieel niveau. De WHO definieert palliatieve zorg als een benadering die de kwaliteit van het leven verbetert van patiënten en hun naasten die te maken hebben met een levensbedreigende aandoening, door het voorkomen en verlichten van lijden, door middel van vroegtijdige signalering en zorgvuldige beoordeling en behandeling van pijn en andere problemen van lichamelijke, psychosociale en spirituele aard. De verpleegkundige heeft een belangrijke rol in dit zorgproces en is in het merendeel van de gevallen bij palliatieve zorgverlening betrokken gedurende de laatste periode voor het overlijden. Zij is gericht op lichamelijke aspecten als pijn- en symptoommanagement en heeft een rol in psychosociale begeleiding, waarbij het uitgangspunt is aan te sluiten bij emotionele, sociale, spirituele en materiele behoeften van de patiënt en zijn familie. Verpleegkundigen hebben dikwijls een coördinerende rol met betrekking tot de afstemming van de betrokken zorgverleners en instanties in de vaak complexe palliatieve situatie.

Palliatieve zorg wordt steeds belangrijker omdat steeds meer mensen overlijden na een terminale palliatieve fase in een eindstadium van kanker, een chronische ziekte of dementie. In deze fase is de zorg gericht op een optimale kwaliteit van leven. De complexiteit van palliatieve zorg wordt bepaald door kenmerken van de zorgsituatie zelf en de wijze waarop deze georganiseerd is. Palliatieve zorg begint in feite al veel eerder dan in de laatste terminale fase omdat daarvoor met de patiënt en diens naasten het vervolgtraject regelmatig besproken moet worden om maximale aansluiting op de mogelijkheden en wensen te verkrijgen.

Omdat palliatieve zorg in principe generieke zorg is, dient iedere verpleegkundige voldoende competenties te bezitten om deze op een adequate wijze te verlenen. Verpleegkundige deskundigheid met betrekking tot palliatieve zorg kan op verschillende niveaus worden vormgegeven. Iedere verpleegkundige zou na het voltooien van een initiële opleiding HBOV of MBOV moeten kunnen functioneren op basisniveau. Het niveau voor gevorderden is bestemd voor verpleegkundigen werkzaam in specifieke palliatieve settingen als een hospice of een palliatieve afdeling in ziekenhuis of verpleeghuis. Van verpleegkundigen met een gespecialiseerd niveau wordt verwacht dat zij in staat zijn om complexe patiëntenzorg te verlenen, consult te geven en nieuwe methoden te ontwerpen. Het basiscompetentie niveau is verbonden met onderwijs van de initiële verpleegkundige opleidingen en korte vervolgcursussen, het gevorderdenniveau wordt verkregen door langer lopende cursussen op postinitieel niveau en het specialistenniveau is gerelateerd aan een masteropleiding.

In dit proefschrift wordt het onderwijs in palliatieve zorg vanuit meerdere invalshoeken belicht. De studies met betrekking tot opleidingen in palliatieve zorg zijn gericht op opleidingen op basis- en gevorderdenniveau.

De eerste invalshoek betreft een literatuuroverzicht (1990-2005). In hoofdstuk 2 wordt een overzicht gegeven van de inhoud en de effecten van palliatieve cursussen voor verpleegkundigen. Er werden 27 studies gevonden die aan de inclusiecriteria voldeden en tenminste een aanvaardbaar of kwalitatief goed design hadden. De onderzoeksvragen van deze studies hadden betrekking op de inhoud, de gehanteerde didactische methoden, de effecten en de standaarden die men hanteerde bij de metingen. In de review werd een onderscheid gemaakt tussen vijf deelgebieden. De meeste studies bleken gericht op de effecten van communicatiecursussen, waarbij in een aantal gevallen specifieke aandacht werd besteed aan de resultaten met betrekking tot death attitude en empathie. Tevens bevatte de review enkele studies naar de effecten van cursussen op het gebied van pijn en daaraan gerelateerde symptomen in de palliatieve fase en zijn er studies gevonden die gericht waren op gecombineerde cursussen met verschillende thema's, relevant voor palliatieve zorgverlening. Het merendeel van deze cursussen was gericht op toepassing in de algemene gezondheidszorg (zowel klinisch als thuiszorg). De meeste cursussen waren monodisciplinair van opzet, ofschoon palliatieve zorg over het algemeen multidisciplinair verleend wordt. Van de 27 studies laten 21 een positief effect zien ten aanzien van een of meer uitkomstmaten als verbeterde kennis, meer adequate communicatie, een verbeterde death attitude of het toepassen van een pijnscoringsinstrument.

Er is een duidelijke tendens dat een combinatie van didactische methoden het meest effectief is. Op het gebied van communicatie moet, behalve aan vaardigheden, aandacht besteed worden aan aspecten als death attitude en empathie. Eveneens effectief is een gecombineerde cursus met meerdere thema's waarbij theorie en praktijk elkaar afwisselen en er aandacht besteed wordt aan reflectie. Het aantal uren besteed aan de cursussen en trainingen liep uiteen, variërend van een korte instructie van een dagdeel gericht op een specifiek thema tot meerdaagse cursussen van ruim 100 uur. Het merendeel van de cursussen bestond uit meerdaagse bijeenkomsten.

Slechts 6 van de 21 studies met een positief effect hadden een design van goede kwaliteit: randomised control met pre- and posttest en follow up, waarbij gebruik werd gemaakt van valide en betrouwbare instrumenten. De conclusies moeten daarom met enige voorzichtigheid worden getrokken.

In hoofdstuk 3 komt een inhoudelijke invalshoek aan de orde. De inhoud van een korte, vierdaagse cursus palliatieve zorg voor verpleegkundigen op postgraduate, niet-specialistisch niveau werd beschreven. De thema's waren ontwikkeld op basis van een literatuuronderzoek naar behoeften van palliatieve patiënten en van verpleegkundigen. De cursus bestond uit vier maal een dag onderwijs gevolgd door vier supervisiebijeenkomsten onder leiding van een docent. De groep cursisten bestond uit verpleegkundigen afkomstig uit diverse ziekenhuizen en uit de thuiszorg; zij waren werkzaam op niet gespecialiseerde afdelingen of in niet gespecialiseerde teams. Deze heterogene samenstelling was gebaseerd op het uitgangspunt dat cursisten met een verschillende werkomgeving van elkaar zouden kunnen leren. Deze gecombineerde cursus richtte zich op de ontwikkeling

van kennis, attitude en vaardigheden en bevatte onderwerpen als de context van de palliatieve zorg, pijn- en symptoommanagement, communicatie, spirituele zorg, complementaire zorg, humor en het omgaan met sterven in de verschillende culturen. Er werd gebruik gemaakt van diverse didactische werkvormen. Omdat gebrek aan steun op de afdeling een belangrijke negatieve factor blijkt te zijn die toepassing van het geleerde belemmert, werd van cursisten gevraagd om opdrachten te doen die hun zichtbaarheid op de afdeling zou kunnen stimuleren. Zichtbaarheid is bevorderlijk voor de steun van collega's en leidinggevenden en draagt daarmee bij aan implementatie. In de supervisiebijeenkomsten werd daarom aandacht besteed aan strategieën om veranderingen op de afdeling te bewerkstelligen om zo het geleerde te kunnen toepassen.

De derde invalshoek, beschreven in de hoofdstukken 4 en 5, is een methodologische. Het gaat hierbij om de vraag welke meetinstrumenten gebruikt kunnen worden om de effecten van cursussen en curricula palliatieve zorg te meten. Deze effecten kunnen worden omschreven in termen van een effectiever functioneren van de verpleegkundige in de zorg voor palliatieve patiënten en hun familie, met een adequate pijn- en symptoombestrijding en een goede communicatie waarbij patiëntproblemen worden opgespoord en de patiënt en zijn familie zich gehoord voelen. Het verbeterde functioneren kan op verschillende manieren worden gemeten, aansluitend op hetgeen van belang is in het curriculum. Een kennis- en inzichttoets kan worden ingezet om toegenomen kennis en inzicht te meten die aan de basis staan van meer competent handelen. Een instrument om persoonlijke effectiviteit te meten geeft een indruk van het gepercipieerde competentieniveau ten aanzien van palliatieve zorg en een empathie instrument is een weergave van het niveau van empathie zoals dat in de communicatie tussen verpleegkundige en patiënt tot uitdrukking komt.

Allereerst werd de ontwikkeling van een kennis- en inzichttoets, gebaseerd op een bestaande Palliative Care Quiz for Nurses (PCQN) beschreven. Deze toets is gericht op drie dimensies, namelijk principes van palliatieve zorg, pijn- en symptoommanagement en psychosociale en spirituele zorg. De oorspronkelijk klinisch gerichte toets is met een aantal items met betrekking tot thuissituatie uitgebreid en werd getest in verschillende groepen, met name studenten verpleegkunde van een Bachelors opleiding, verpleegkundigen werkzaam in ziekenhuizen en in de thuiszorg en ziekenverzorgenden, werkzaam in verpleeghuizen. Dit resulteerde in een valide en betrouwbare test van 36 items die geschikt is voor de Nederlandse situatie: de Comprehensive Palliative Care Quiz for Nurses (C-PCQN).

De mate van eigen effectiviteit is positief gecorreleerd met het uitvoeren van nieuw aangeleerd gedrag na een cursus of training. In het onderwijs kan deze kan worden beïnvloed door positieve feedback en instructie en het fungeren als rolmodel. Het concept van de eigen effectiviteit is een contextgebonden begrip, wat betekent dat men verwacht succesvol gedrag te vertonen in specifieke omstandigheden. Het instrument dat de eigen effectiviteit meet in de palliatieve situatie moest daarom speciaal voor deze context worden ontwikkeld.

Een oorspronkelijke lijst met 30 items is voorgelegd aan experts in de palliatieve zorg, waarna een gewijzigde lijst is voorgelegd aan een heterogene groep van studenten, verpleegkundigen en ziekenverzorgenden aan voor de aanvang van een cursus palliatieve zorg. Het resultaat was een 18-item lijst waaruit de hoogst scorende, niet discriminerende items zijn verwijderd. Deze items hadden vooral betrekking op communicatie: de Self Efficacy Test Palliative Care (SEP).

Praktijkervaring van de verpleegkundigen en ziekenverzorgenden leek de scores op de test positief te beïnvloeden. In vergelijking met verpleegkundigen verwachtten ziekenverzorgenden bijna even vaak succesvol te zijn in hun handelen ten aanzien van palliatieve patiënten, terwijl de scores op de kennis- en inzichttoets duidelijk lager waren. Mogelijk overschatten zij zichzelf systematisch, juist vanwege deze praktijkervaring. De test lijkt vooralsnog niet geschikt om een onderscheid tussen verschillende groepen aan te tonen. De inzet van de SEP om een mogelijke verandering in eigen effectiviteit te meten op individueel niveau of binnen eenzelfde groep is waarschijnlijk wel geëigend.

Hoofdstuk 5 is gericht op een beschrijving van een onderzoek naar de psychometrische kwaliteiten van een instrument om empathie te meten in palliatieve verpleegsituaties. Empathie wordt gezien als een belangrijk aspect van de communicatie in de palliatieve zorg. Hierbij beschouwen we empathie niet alleen als een eigenschap, maar met name als een vaardigheid die geleerd kan worden door middel van training en instructie. Een bestaand instrument dat geschikt lijkt om empathie op deze wijze opgevat te meten, is de Staff Patiënt Interaction Scale for Palliative Care Nursing (SPIRS-PCN). Dit instrument richt zich op het stadium van de 'expressed empathy', gericht op een waar te nemen aspect van de communicatie tussen hulpverlener en patiënt. Dit instrument biedt ook de ruimte om naast de affectieve componenten van empathie, voor palliatieve zorg van belang zijnde aspecten als informatie en adequate verwijzing te scoren. Het is een paper and pencil instrument waarin de patiënt tien statements maakt waarin woede, depressie, isolatie, zorg en wantrouwen tot uiting komen. Onderzocht is de criterium gerelateerd validiteit, de homogeniteit en de interbeoordelaarsbetrouwbaarheid door het instrument aan vijf categorieën (student)verpleegkundigen voor te leggen (known groups method). Eerstejaars studenten HBOV en MBOV met slechts geringe praktijkervaring scoorden matig op de SPIRS-PCN; zij scoorden volgens verwachting lager dan palliatieve verpleegkundigen met meerdere jaren ervaring. Het opleidingsniveau was bij studenten niet van invloed op de scores; de jonge leeftijd van beide categorieën studenten was meer van invloed op hun empathisch vermogen dan hun onderwijsniveau. Sekse bleek eveneens niet van invloed op de mate van expressed empathie. De scores van religieuze jonge studenten waren hoger dan die van seculiere jonge studenten, waarbij mogelijk morele ontwikkeling een rol speelt.

De SPIRS-PCN is waarschijnlijk een betrouwbaar en geschikt instrument om het empathische vermogen te meten wanneer een onderwijsontwikkeling over een

langere periode wordt meegenomen, waarbij de beroepservaring toeneemt. Dit is een beperking ten aanzien van de resultaten met betrekking tot de validiteit.

De vierde invalshoek heeft betrekking op twee studies naar de effecten van onderwijs op initieel (Bachelors)niveau en postinitieel niveau. Deze worden beschreven in de hoofdstukken 6 en 7.

Hoofdstuk 6 bevat een weergave van de empathie ontwikkeling van studenten in de Bachelors opleiding in de verpleegkunde. De ontwikkeling van empathie wordt beïnvloed door factoren als bijvoorbeeld rijping, geslacht, praktische ervaring en opleiding. Onderzocht werd of het empathische vermogen van twee groepen studenten met een verschillende programmavolgorde (hbov-duaal en hbov-voltijd) gedurende hun opleiding zou toenemen en of een trainingsprogramma communicatie en praktijkervaring een positief effect op de scores van deze empathietest zouden hebben. In deze studie werd de SPIRS-PCN gebruikt om het empathieniveau te meten in een time series design gedurende vier metingen tijdens de opleiding. De scores van de totale groep studenten namen significant toe naarmate de opleiding vorderde van 44.7 naar 56.4 ($p<0.001$). Het meeste werden de scores beïnvloed door een cursus communicatievaardigheden (van 44.6 naar 49.5 $p<0.001$) voor de groep duale studenten en van 48.6 naar 53.5 ($p<0.001$) voor de groep voltijdstudenten. De praktijk had vooral een invloed op de scores van de duale studenten (van 53.4 naar 57.4, $p<0.001$) Verbetering van het empathische vermogen van studenten verpleegkunde kon echter niet uitsluitend worden toegeschreven aan een specifiek onderdeel van het Bachelors programma, maar werd ook beïnvloed door het theorieprogramma als geheel.

Hoofdstuk 7 beschrijft een studie naar de effecten van een postinitiële cursus palliatieve zorg. De inhoudelijke verantwoording van de thema's berust op een literatuurstudie naar de behoeften van patiënten en verpleegkundigen. De effecten van de cursus werden gemeten via een kennis- en inzichttoets (C-PCQN) en via een self-efficacy instrument (SEP) in een pretest/post-test quasi experimenteel design met conveniencesample. De cursus is gegeven aan zowel verpleegkundigen als ziekenverzorgenden en had een significant positief effect op het kennis- en inzichtniveau van de totale groep cursisten met een stijging van de scores van 10.3 naar 14.6 in vergelijking met de scores van de controlegroep van 10.5 naar 13.1 ($p<0.05$). Ook het niveau van eigen effectiviteit was sterker gestegen bij de cursisten in vergelijking met de controlegroep. Dit resulteerde in een lagere score op de SEP (van 47.3 naar 42.5) in vergelijking met de controlegroep (van 48.5 naar 46.2). Verpleegkundigen boekten meer vorderingen op de SEP (van 50.7 naar 41.7) en ziekenverzorgenden behaalden hun belangrijkste verbetering op de C-PCQN (van 8.6 naar 13.5). De stijging van de scores van de C-PCQN was het grootste op het gebied van pijn- and symptoommanagement.

De laatste invalshoek welke beschreven wordt in hoofdstuk 8 is die van de implementatie. In het kader van een stimuleringsprogramma van de overheid 'Palliatieve Zorg in de Terminale Fase', een programma dat gericht was op vernieuwing, structuuraanpassing, behoefteplanning en deskundigheids-bevordering in de palliatieve zorg, werd er centraal door één HBOV een curriculum palliatieve zorg ontwikkeld voor de Bachelors opleiding verpleegkunde (HBOV). Palliatieve zorg is niet alleen van belang in een opleiding verpleegkunde omdat de behoefte aan deze zorg steeds meer zal toenemen, maar ook omdat in deze zorg alle invalshoeken van belang voor de vorming tot verpleegkundige kunnen worden verenigd. De bedoeling was dit curriculum als gouden standaard op alle HBOVs te implementeren. Aan dit voornemen is echter weinig centrale sturing gegeven.

Deze studie was gericht op een inventarisatie van het aantal uren dat twee jaar na ontwikkeling van het centrale curriculum in de HBOVs aan palliatieve zorg werd besteed en de rol die het centraal ontwikkelde curriculum palliatieve zorg daarbij gespeeld heeft. De conclusie was dat in de meeste HBOVs palliatieve zorg geïntegreerd werd aangeboden tijdens de eerste twee jaren van de opleiding met een studielast van 20 uren of minder. In de differentiatiefase konden studenten doorgaans kiezen voor dit thema wanneer het hun interesse had of wanneer ze dachten dat hun competenties op het gebied van palliatieve zorg moesten worden aangevuld gezien hun stage. 35% van de opleidingen was ontevreden over het curriculum palliatieve zorg; geen van deze opleidingen gebruikte het centraal ontwikkelde curriculum. Het aantal structurele uren met betrekking tot palliatieve zorg is slechts gering en bovendien worden deze geïntegreerd aangeboden.

Het centrale curriculum werd slechts op vier HBOVs (gedeeltelijk) gebruikt. De implementatie van het centrale curriculum kan als niet geslaagd worden beschouwd, gezien het geringe gebruik op de verschillende HBOVs. De matige interesse van de onderwijsmanager, te weinig publiciteit en te weinig aandacht van de ontwikkelaars voor het decentrale implementatieproces waren de belangrijkste negatieve factoren, waarbij bovendien centrale sturing ten dienste van de implementatie ontbrak. Vanwege de toegenomen individuele vrijheid van de student om zijn eigen leerproces in te richten bestaat bovendien het risico dat het gewenste algemene minimumniveau niet altijd gehaald wordt.

De verdere implementatie zou gericht moeten zijn op het creëren van een virtuele database waar het reeds ontwikkelde materiaal een plaats in kan krijgen. Deze kan als gouden standaard dienen, terwijl deze wendbaar kan worden ingezet. Op deze manier kan worden aangesloten bij het competentiegerichte leren binnen het hoger beroepsonderwijs. Het blijft van belang om aandacht te besteden aan een optimale benutting en onderhoud van een dergelijke database.

In hoofdstuk 9 worden de bevindingen bediscussieerd en aanbevelingen gedaan voor de toekomst. Palliatieve zorg is veelomvattende zorg die niet slechts beperkt is tot de laatste levensfase. De inhoud van palliatieve cursussen moet dan ook gericht zijn op communicatie-aspecten ten aanzien van het detecteren van problemen en psychosociale begeleiding, attitude, ontwikkeling van empathie en pijn en symptoom management. Het verdient aanbeveling om deze thema's in

gecombineerde vorm aan te bieden omdat daar de grootste effecten mee worden bereikt. Deze effecten hebben betrekking op toegenomen kennisniveau van verpleegkundigen, verbeterde communicatiemogelijkheden en de ontwikkeling van een adequate attitude. Het is van belang valide en betrouwbare meetinstrumenten in te zetten om deze effecten te meten, waarbij patiënten meer dan tot op heden betrokken moeten worden

De aandacht voor palliatieve zorg op de HBOV is, ondanks de gewenste implementatie van een centraal ontwikkeld curriculum om een standaard te kunnen hanteren matig. Een elektronische database is waarschijnlijk een adequaat implementatie-instrument, waarbij aandacht van de opleiding noodzakelijk blijft om een minimum deskundigheidsniveau bij de individuele student te garanderen.

Dankwoord

Waarom dit onderwerp
Toen ik na de HBOV een aantal jaren als wijkverpleegkundige heb gewerkt waren regelmatig patiënten tijdens hun laatste levensfase in zorg. Deze patiënten en hun familie zijn me altijd bijgebleven in hun verscheidenheid in het omgaan met hun naderende dood. Wat ik heel bijzonder vond was dat ik deel mocht uitmaken van deze periode. Kenmerkend vond ik vooral de perspectiefwisseling die bijna altijd optrad: veel dingen waar we ons normaliter druk over maken in het leven worden totaal onbelangrijk; wat onbetekenend leek komt plotseling centraal te staan.

Als docent van de HBOV heb ik mij vervolgens jaren het hoofd gebroken over de ontwikkeling van goed verpleegkunde onderwijs voor studenten. Waarbij goed onderwijs betrekking heeft op trefwoorden als inspirerend, interessant, actueel, diepgang en zich geraakt voelen. Dit onderwijs, genoten door studenten tijdens een periode van hun leven die veel uitdagingen juist daarbuiten biedt, zou moeten leiden tot goede verpleegkundigen, waar we trots op kunnen zijn. Palliatieve zorg is voor deze studenten een cruciaal thema waaraan zij bij uitstek kunnen leren om goede beroepsbeoefenaren te worden omdat het zoveel waardevolle invalshoeken in zich verenigt. Ethische, verpleegkundige, medische en spirituele aspecten die samen de kern van het beroep vormen komen als vanzelfsprekend aan bod.

Hoe het begonnen is
Een aantal jaren geleden in een metro in Londen, in een coupé met de toenmalige Nijmeegse hoogleraar verplegingwetenschap Carla Frederiks op weg naar de University van East London. De HAN wilde met deze universiteit een multidisciplinair Masterprogramma ontwikkelen in een tijd waarin er nog geen sprake was van Masterprogramma's binnen hogescholen; ik bedacht me plotseling tijdens die tocht dat ik wel zou willen promoveren op het onderwerp onderwijs in palliatieve zorg. Het doen van onderzoek was me tijdens mijn studie Master of Science in Nursing goed bevallen en het leek me een soort levensopgave te moeten worden om te promoveren op dit onderwerp. Het leek Carla in die metro ook een goed idee; en zo is het gekomen. Carla, jij hebt me bij het eerste onderzoeksvoorstel op dit gebied bekwaam door de ethische commissie heengeloodst, terwijl er veel vragenlijsten met moeilijke vragen voor een complexe patiëntencategorie moesten worden goedgekeurd.

Het proces
Toen Carla met emeritaat ging en Theo haar opvolger werd heeft hij mijn promotie overgenomen. Jaren lang hadden we een keer per maand een afspraak die als stok achter de deur fungeerde, waarbij de vorderingen werden besproken, voortschrijdend inzicht werd toegepast en een strategie voor het volgende artikel werd uitgezet. Tijdens deze bijeenkomsten namen we behalve mijn proefschrift ook de verpleegkundige wereld door en wat ons verder bezig hield en we hebben veel gelachen over de absurditeiten van het leven. Theo mijn dank daarvoor.

George, behalve je statistische deskundigheid waar ik dankbaar gebruik van heb gemaakt, heb ik je vooral gewaardeerd vanwege je relativeringsvermogen. Zo heb je me bijvoorbeeld duidelijk proberen te maken dat een hoofdstuk over implementatie in het proefschrift waarschijnlijk niet cruciaal voor het verloop van de wereldgeschiedenis zou blijken te zijn. Het is er toch ingekomen, maar ik denk dat je gelijk hebt.

Yvonne, je snelle commentaar op de vele concept versies van een aantal artikelen was iedere keer bijzonder inspirerend. Ik kreeg altijd het idee dat ik toch op de goede weg was, hoewel dat vooraf niet zo vanzelfsprekend was.

Met een aantal leden van de PhD groep heb ik een week doorgebracht op de hei omdat gezamenlijke opsluiting met begeleider Theo altijd in de buurt, zou moeten leiden tot vorderingen in onze promotietrajecten in het algemeen en het mijne in het bijzonder. De muziek van Spinvis en jullie aanwezigheid leidde echt tot veel inspiratie; sindsdien laat ik bij sommige momenten hun tonen uit de boxen van mijn computer schallen om tot creatieve oplossingen voor moeilijke problemen te komen.

Mijn dank gaat eveneens uit naar de faculteitsdirectie van de HAN (Bart van Bergen en Walter van Gisbergen) die mij – stilzwijgend – in de gelegenheid stelde om te promoveren. Hoewel de afspraak was dat we het er eigenlijk nooit over zouden hebben waren jullie regelmatig toch benieuwd naar de vorderingen en of het me in combinatie met een baan als instituutsdirecteur van Verpleegkunde uiteindelijk zou lukken. Dus we hadden het er soms toch zijdelings over. Het resultaat ligt hier inmiddels voor jullie.

Ik wil verder een aantal van mijn collega's bedanken die ik heb gebruikt om vragenlijsten uit te proberen, studenten te werven, vragenlijsten weer in te nemen en achter afvalligen aan te gaan. Op onverwachte momenten had ik soms verrassende discussies met jullie over de bevindingen van het onderzoek waardoor ik weer op nieuwe gedachten kwam.

Een aantal HBOV studenten heeft ten behoeve van hun afstudeerproject actief geparticipeerd in het uitwerken van een subthema en de verwerking van de data. Daarmee bevestigden jullie mijn opvatting dat ook hbo studenten heel goed in staat zijn om te participeren in onderzoek en een wezenlijke bijdrage kunnen leveren.

Ik wil ook zeker het secretariaat bedanken. Mijn eerste secretaresse Bep, die omdat ze voorheen op de universiteit had gewerkt vanaf het begin het belang van de plaatsing van een artikel begreep en het geaccepteerde manuscript steevast voorzien van een bladerenboeket weer aan mij retourneerde. Maar ook Marian dank ik voor alle lay-out kwesties die ze iedere keer weer moest oplossen wanneer er pagina's en tabellen op raadselachtige wijze gingen schuiven en maar niet terug in het gareel wilden.

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Jan en de kinderen, Elon en Cyriel, jullie zijn een belangrijk onderdeel van mijn bestaan. Jan, je hebt me regelmatig, op een doodgewone doordeweekse woensdag, wanneer de rest van Nederland zich met een gehaktbal moest behelpen, een viergangen menu met amuse voorgeschoteld om aan te tonen dat het werken achter de computer tot niets leidt wanneer andere geneugten worden verwaarloosd.

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Curriculum vitae

Marian Adriaansen was born in 1955 in Utrecht and passed the primary school in Bunnik. She followed the gymnasium B on the Catholic high school the Breul in Zeist from which she graduated in 1974. After that she followed the HBOV at Nijmegen from 1974-1978. During the last year she started with M.O.- A Pedagogy, followed by M.O.- B Pedagogy.

After her qualification as a nurse she worked for almost two years as primary group leader at the Groesbeekse Tehuizen, an institution in which care for the mentally disabled was provided. During the five years that followed she was employed as a district nurse in Deest and Afferden (district Maas and Waal), an all-round solo position, with many responsibilities and autonomy.

In 1984 she started as a nursing lecturer at the HBOV on the Catholic Higher School for Nurses, a predecessor of the Professional University of Arnhem and Nijmegen. Her expertise was home care nursing, quality of care and nursing research. During this period she followed the teacher training programme social work (first degree) and the master or Science in Nursing (Utrecht). She completed this programme with a study to the implementation of standard nursing care plans for which she did research in UMC St Radboud.

In 2000 she was appointed as a deputy manager of the HBOV and from 2001 she functioned as manager of the Institute of Nursing Studies. Since three years she has been President of the national consortium HBOV. As a member of the national steering committees GGZ and Eldery Care she payed much attention to the positioning of the HBO nurse at an adequate level.

She is author of a number of books directed on home care and chronically ill patients, written for both MBO and HBO level. Since ten years she has been member of the external editing board of the Journal of Nursing (TvZ). From 1998-2004 she was member of the Advisory Committee on Training in Nursing (European Commission). In 2004 she participated as external expert in the EU-PHARE Twinning Project, a project that aimed to assist Polen in their implementation of EU legislation. Since 2005 she has been a member of the Dutch committee 'Foreign nurses'.

In 2005 she was appointed as a member of the Supervisory Board of Welstaete/ZVOM, an institution which provides care for the elderly and chronically patients.

As an external auditor she is involved in Global Initiative on Psychiatry (GIP), where she takes part in auditing activities for projects in the field of psychiatry in Eastern-European countries.

Since 1978 she has been married with Jan van Erp. Together they have two children, Elon (1982) and Cyriel (1984).