Introduction

Investments by countries in health and social care have contributed to improvements in life expectancy of populations globally, among which around 962 million were over 60 years old in 2017 (1-3). In comparison, in 1980, only 382 million people were over 60 years old. At a European level, 183 million individuals were over 60 years old in 2017. By 2050, around 247 million individuals aged 60 years and above will live in Europe (2, 3). The prolonged life expectancy increases the possibility of the development of chronic non-communicable diseases. Chronic non-communicable diseases were the cause of death among 38 million people in 2013 (4-6) and 40 million in 2017 (7). Among all of these, 15 million individuals who died were aged between 30 to 69 years. Chronic non-communicable diseases include cardio-vascular diseases (17.7 million), cancer (8.8 million), chronic obstructive pulmonary disease (3.9 million), diabetes (1.6 million), and other diseases (5, 7). Chronic non-communicable diseases are accompanied by disturbing symptoms that gradually decrease the quality of life of an individual. These symptoms are chronic pain, nausea, exhaustion, sleep disorder, and social isolation (8-10).

They require a lot of energy and time from the person and their care partners, as well as making difficult decisions and coping with the disease; many times, persons are left to themselves in such situations. Thus, those persons need a comprehensive treatment plan, addressing their physical, mental, spiritual and social needs, as well as adapting to the course of the disease and their medical condition (11, 12). As a result, the person is more fearful about the uncertainties of the future, the loss of their self and identity and consideration of their wishes at a time when they may not be able to fully express themselves because of the disease progression (13, 14).

To improve the quality of life of those persons, it is important to have an integrated approach to the provision of palliative care, which should include, the promotion of an active person role, sharing decision-making, interdisciplinary working, treatment of all chronic non-
communicable diseases (11, 12) and providing emotional support to care partners (15). Person-centred care addresses these holistic needs in a way that places the person’s beliefs, values, needs, wants and desires at the centre of decision-making. Person-centred care is an integral and holistic approach to palliative care. Persons are treated holistically with care needs adapted according to the course of the disease, the person’s health condition and their unique response to their symptoms (11, 12). Furthermore, international organizations in palliative care (Chair of Palliative Care, WHO Collaborating Centre Public Health Palliative Care Programmes and Worldwide Hospice Palliative Care Alliance) recommend a new model of early person-centred palliative care for persons and their care partners. The new model of palliative care includes the provision of a person-centred approach for all chronic non-communicable diseases, provided in all health systems globally, with a focus on preventing disturbing symptoms through advanced care planning (16).

The concept of early person-centred palliative care refers to the application of a holistic approach to the provision of care services to persons with life-threatening progressive diseases and offering support at the physical, psychological, social, spiritual, and emotional levels, as well as support for care partners (10, 13, 14). Person-centred palliative care strives to maintain and strengthen the quality of life of persons and their care partners. Limitations in the provision of palliative care are associated with a lack of knowledge, lack of experience by nurses, fear of treating palliative symptoms, loss of control by nurses over treatment, and fear of providing poor palliative care to persons and care partners (8, 14). In offering high-quality palliative care services, it is important that health personnel meet persons’ needs arising from disease and associated life circumstances (8, 14, 17). On the basis of published evidence, it is clear that early palliative care is one of the key approaches to providing care to persons with life-threatening progressive disease. Evidence (8, 9, 18) also suggests that palliative care is still not included early enough in the process of treatment of persons with serious disease and sometimes
only when the terminal phase has already begun. Available evidence (10, 18) emphasizes the importance of early initiation of palliative care at the establishment of a diagnosis. Currently, the model of palliative care in Slovenia and Finland is mostly disease-centred and frequently used only when complications of disturbing symptoms arise and is mostly provided at the end of life stage and without an advanced care plan in place. We choose to compare Slovenian and Finnish nurses’ perceptions of early palliative care for different various reasons. The first is geological, historical, social, linguistic and national differences between countries. Furthermore, both countries are in the same Group 4a level of palliative care development, which means that both countries have preliminary health system integration of palliative care. Besides that, the first author has been in Finland on Erasmus+ exchanges as a student where he gained insights into palliative care services there. Therefore, we are interested in finding out whether there are differences in perception, knowledge, and attitudes of palliative care between countries that are in the same group according to the WPCA classification (19).

**Aims**

This study aims to investigate the perceptions, knowledge, and attitudes of palliative care by nurses working in palliative care, as well as the differences in perception, knowledge, and attitudes of palliative care between Slovenia and Finland.

*Based on the literature review it was hypothesised:*

1. There is a statistically significant difference in the perceptions of palliative care among nurses in Slovenia and Finland;
2. Between Slovenia and Finland there is a statistically significant difference in knowledge of palliative care among nurses
3. There is a statistically significant difference in the attitudes of palliative care by nurses between Slovenia and Finland.

**Methods**
Study design and instrument

Our study is based on a cross-sectional descriptive survey. To measure perceptions, knowledge, and attitudes of palliative care by nurses working in palliative care we used two instruments. The first 'The palliative care quiz for nursing (PCQN)' by Ross and colleagues (20) was used for measuring knowledge. The second instrument ‘The Nurses’ Knowledge and Attitudes towards the Palliative Care’ by Ayed and colleagues (21) was used for measuring attitudes towards the palliative care. 12 statements about attitude were assessed on a 5-point Likert scale. The total possible score was 60. The attitude scores were arranging into good (≥76%), moderate (51-75%), and poor (≤50%) groups.

Original instruments were translated from English to Slovene and Finnish with the help of an independent translator (a researcher in the field of nursing care). After processing and the harmonisation of the translation of the instrument into Slovene and Finnish a reverse translation into English was done by an independent translator (he had not seen the English original). In the next step, we compared the instrument in Slovene and Slovene return translation into English and compared the instrument in Finnish and Finnish return translation into English. Then finally we formulated an instrument, which was sent to the nurses working in palliative care.

The original PCQN (20) reliability was reported as having an internal consistency of 0.78. In our research, internal consistency was reported as 0.68. Internal consistency among original questionnaire ‘The Nurses' Knowledge and Attitudes towards the Palliative Care’ (21) was 0.93 Cronbach’s alpha (21). In our study internal consistency was reported as 0.76. We also added demographic questions to the questionnaire, such as gender, age, citizenship, education and work experience.

Sample
In this study, we used convenience sampling, which meant that a part of the population that was most at hand was selected (22). We calculated the sample size using the population size, the confidence level \( (e) \) and margin of error \( (z) \) (23). The approximate sample of nurses was \( n=250 \) \( (e=95\%; z=5\%) \).

The inclusion criteria for the sample were nurses who had finished a nursing degree and have worked in palliative care for at least of one month. We collected the data between December 2016 and June 2017. Based on prior ethical approval from the partner institutions, the study was conducted in a Slovenian hospital that provides secondary and tertiary care, as well as hospices. In Finland, the research was conducted in the northern region of Savonia. After securing ethical approval for the survey, we distributed 250 paper-based questionnaires in Slovenia and 235 were returned. In Slovenia, we removed questionnaires with missing data (15 questionnaires). After that we had 220 questionnaires fully completed and included for further analysis (88% response rate). In Finland, we used an online survey that was sent to all members of the Savo nurses association (approx. 2000) and the polling ended when we received 220 responses to match the number in Slovenia. Because all of the questions required mandatory answers, there were no missing values in any of the variables for data collected in Finland.

**Ethics**

Prior to the research commencing, approval from the relevant ethics committees in Slovenia and Finland was obtained (038/2016/7083-2/504). The purpose and objectives of the study were explained to participants in writing, as well as information about confidentiality, anonymity, and voluntary withdrawal from participation at any stage of the research. Upon request, participants were provided with the study results. The study strictly adhered to ethical principles of the Code of Ethics in Health Care of Slovenia (24), the Declaration of Helsinki (25), the provisions of the Oviedo Convention (26), Code of medical ethics (27) and the Nuremberg Code (28). The permissions collected in the survey and completed questionnaires were stored
in a locked room to which only researchers have access. These documents will be retained for ten years after the completion of the survey.

Data analysis

After receiving the completed research questionnaires from Slovenia and Finland, we entered the data into the IBM SPSS 22.0 program and created a database for further analysis of the collected data. We used the computer programs Microsoft Excel 2016 and IBM SPSS 22.0. to analyse the results. For the analysis of the results we used descriptive and inferential statistical methods for determining the difference between the selected countries. To determine the statistical significance of the results, the degree of statistical significance $\alpha = 0.05$ will be considered. Results are reported as medians (interquartile range [IQR]) or as numbers (%). Normality of distribution was tested using the Kolmogorov-Smirnov normality test. Based on the type of variables and the appraisal of the distribution, we opted for the Mann-Whitney U test.

Results

Participants

The study included $n = 220$ nurses from Slovenia and $n = 220$ nurses from Finland. The total sample for the research was $n = 440$ nurses who work in clinical practice and have experience with palliative care or work in this field. Ninety-three percent ($n = 407$) of the total nurse respondents were female and 7% ($n = 33$) male. The median age of respondents was 43 years (IQR 34-53). In Slovenia, the median age of the respondents was 40 years (IQR 32-50) and in Finland, the median age of the respondents was 48 years (IQR 37-56). The median work experience of the respondents was 17 years (IQR 8-27). The median work experience in Slovenia was 16 years (IQR 8-26) and in Finland, it was 18 years (IQR 9-28). The most commonly achieved degree of education was a bachelor (74%; $n = 327$) and the least common achieved degree of education was a doctorate (3%; $n = 13$). In Slovenia, a bachelor’s degree
was reached in 83% (n= 183) and in Finland, this was also the most commonly achieved degree of education (65%; n= 144) (Table 1).

Table 1 Presentation of the descriptive statistics about the respondents

Perception of palliative care

We were interested in knowing if there were statistically significant differences in the overall perception of palliative care among nurses in Slovenia and Finland. Before we determined the statistical tests, we looked for the distribution of variables: we compared the variables of perception of palliative care in both countries. Based on the type of variables and the appraisal of their distribution, we opted for the Mann-Whitney U test. We concluded that there is a statistically significant difference between Slovenia and Finland in the overall perception of palliative care from the nurses’ point of view (U= 20059.0; p= 0.002). These findings are presented in Table 2 and support the hypothesis of the study. In both countries there are different perceptions of palliative care. This may also be due to the fact that in Finland 41% (n= 91) of the nurses responded that they have experience in palliative care and in Slovenia 32% (n= 71).

We found statistically significant differences between both countries in all items, except two items: (a) receiving enough knowledge about palliative care to implement it in practice (U=23108.0; p=0.389) and (b) symptom management, family support and treatment in the terminal phase play an important role (U=24120.0; p=0.946). The overall perception range for both countries was 14 to 45. The group perception mean score was 31±4.09.

Table 2 Mann-Whitney U test of perception of palliative care between Slovenia and Finland

Knowledge of palliative care

We were interested in knowing if there is a statistically significant difference in overall knowledge about palliative care among nurses in Slovenia and Finland. We found that there is no statistical significance between Slovenia and Finland in the overall knowledge of palliative care from the nurses’ perspective (U= 23254.0; p= 0.477). Results showed low levels of
knowledge in both countries (average of 44% correct answers). In both countries, a desire for additional knowledge is present: 95.7% (n= 421) of nurses, with only 4% (n= 19) saying that they do not want or need additional knowledge. Despite, that we did not find statistical significant differences in overall knowledge, we found differences in items about (a) decision-making in palliative care (U=19095.0; p=0.001), (b) communication of nurse about death (U=18339.5; p=0.001), (c) the patient's family inclusion in palliative care (U=17224.5; p=0.001), support to the care partners by nurses (U=20131.0; p=0.001), (d) manifestation of pain (U=20887.5; p= 0.007), (e) pain threshold (U= 18895.5; p= 0.001), (f) drugs in the terminal phase (U= 20770.0; p=0.006), (g) usage of morphine (U=18520.0; p= 0.001) and (h) adjuvant therapy (U=18690.0, p=0.001) (Table 3).

Table 3 Mann-Whitney U test of knowledge of palliative care between Slovenia and Finland

Attitudes towards palliative care

We were interested in knowing if there is a statistically significant difference in the overall attitudes of palliative care by nurses in Slovenia and Finland. We found that there is a statistically significant difference between Slovenia and Finland in the overall attitudes of palliative care from the nurses’ perspective (U= 13697.0; p= 0.001). However, nurses in both countries are open to the attitudes of palliative care and they partly use the principles of palliative care in their practices: in Slovenia 45% (n= 98) of nurses and in Finland 39% (n= 86). We did not find statistically significant differences in two items about establishing the plan for the course of treatment and care (U= 23985.0; p=0.863) and nurses’ difficulties in talking about death with the care partners (U=21990.5; p=0.081) (Table 4). However, the results of attitude scores in our study shows that 70.9% (n= 312) of nurses had good attitude towards palliative care.

Table 4 Mann-Whitney U test of attitudes of palliative care between Slovenia and Finland
Usage of palliative care and interest for additional education

Nurses in both countries use the principles of palliative care in their work. In Slovenia, 36% (n= 80) answered “Yes, I use the principles of palliative care”, and in Finland, 26% (n= 58) of nurses chose this answer. In Slovenia, 45% (n= 98) and in Finland 39% (n= 86) of nurses answered that they partly apply the principles of palliative care, but they think not often enough. Also, around 19% (n= 42) of nurses in Slovenia and about 35% (n= 76) in Finland answered that they do not apply the principles of palliative care in their work with persons. This shows that in both countries, many nurses use the principles of palliative care to help persons with life-threatening disease, as well as their care partners with comfort.

Likewise, we asked respondents if they wished to obtain additional formal knowledge and skills about palliative care for use in practice.

In Finland, 96% (n= 212) of nurses want to have more knowledge, and in Slovenia, 95% (n= 209) of nurses want to have more knowledge in and skills of palliative care. Only 4% (n= 8) of nurses in Finland and 5% (n= 11) of nurses in Slovenia think they do not need to obtain more knowledge and skills in palliative care. With that, we can conclude that nurses are very much aware and interested in having more knowledge, as well as the appropriate skills to help persons and their care partners through difficult times.

Discussion

This study investigated the perceptions, knowledge, and attitudes of palliative care by nurses working in palliative care, and also compared the perceptions, knowledge, and attitudes of palliative care between Slovenian and Finnish nursing teams. We identified that nurses in both countries have different perceptions and attitudes towards palliative care, but have the same level of knowledge.

Perception is a personal manifestation of how one views the world that is influenced by many sociocultural elements (29), experiences with palliative care, the nature of the provided
palliative care of the patient and educational preparation for work in this field (30). The group
perception mean score was 31±4.09. The results of our study regarding differences in
perception showed statistically significant difference between both countries. In our study we
surveyed 440 nurses, among whom 37% (n= 162) were those who provide palliative care on a
daily basis and 63% (n= 278) had experience with palliative care based on an occasional
meeting with a palliative patient during their career. In addition, in Finland 41.4% (n = 91) of
nurses answered that they have experience in palliative care, and in Slovenia only 32.3% (n =
71) of nurses answered that they have experience in this discipline. Experiences are very
important, because nurses with good experience can provide a high-quality palliative care to
patients and relatives as well as good end-of-life care (31). In order for nurses to provide high-
quality early person-centred palliative care, it is important that nurse have high levels of
knowledge about person-centred palliative care, as well as very good experience of palliative
care (8, 9). Other studies (17, 18) have shown that nurses have experience in palliative care, but
not enough quality experience and knowledge to be able to provide adequate palliative care to
persons with a disease that is threatening their quality of life.

In our study, we found that there is no statistically significant difference between Slovenia and
Finland in overall knowledge of palliative care. In both countries, a low level of knowledge is
present. Nevertheless, 95.7% (n=421) of the nurses in our study want to gain additional
knowledge of palliative care with which they can provide adequate working skills of palliative
care to the patient. Kim and Hwang (32) found that nurses have a good basic knowledge of
palliative care but lack specialized knowledge. Specialized knowledge is very important,
because many times, according to Kim and Hwang (32) and Coelho and colleagues (31) nurses
have difficulties with regard to symptom management that may threaten the quality of care of
persons with life-threatening disease and accompanying disturbing symptoms. Furthermore,
experts have concluded that there is still a lack of attention on how to deliver high-quality
knowledge in palliative care in undergraduate and postgraduate academic nursing programs.
An experienced nurse with knowledge and completed education of person-centred palliative care can offer appropriate high quality early person-centred palliative care to persons with accompanying disturbing symptoms (34, 36). Education programs that focus on palliative care would help nurses to achieve better knowledge (37, 38). However, to develop such an approach, person-centred palliative care must first be included in undergraduate and postgraduate education as well as in lifelong learning programs. Assessing nursing knowledge is very important, because according to Fabrigar and colleagues (39) knowledge plays an important role in attitude or behavioural consistency. Moreover, nurses’ knowledge and attitude are important in affecting evidence-based practice of person-centred palliative care (32). The results of attitude scores in our study shows that 75% of nurses had good attitudes towards palliative care. These results are consistent with other studies (21), which also indicate that nurses had good attitudes towards palliative care.

One of the important human rights is access to the most appropriate care as well as treatment of disease with accompanying disturbing symptoms. These disturbing symptoms can have a major impact on persons’ quality of life, as well as on care partners. Because of this, it is important to implement early person-centred palliative care the point of diagnosis and before quality of life has significantly deteriorated (8, 10, 40). In order for nurses to provide early person-centred palliative care, it is important that they have high levels of awareness and knowledge about the concept of person-centred palliative care, as well as clarity of beliefs and values about person-centred approaches to palliative care (8, 9). In addition, an integrated approach to palliative care services needed (41).

In studies to determine if nurses have sufficient knowledge of person-centered approaches to palliative care, it was shown that there is an increased need for further education of nurses in palliative care (17, 18, 42). The additional knowledge is required for providing high quality early person-centred palliative care, but it is also necessary for nurses to have enough experience in this kind of work (43-45). Compared with the findings of the study by Boyd and
colleagues (46), it is evident that the nurses who work in palliative care or have some experience with it, are interested in this area of practice and in furthering their knowledge of palliative care. They are willing to obtain new experiences in delivering palliative care to persons (31, 44, 46). This is in line with our study, where 95.7% (n=421) of the nurses want to gain additional knowledge of palliative care with which they can provide adequate working skills of palliative care to the patient. In Finland, 96.4% (n=212) of nurses want to have more knowledge and skills of palliative care, and Slovenia 95.0% (n=209) of nurses want to have more knowledge and skills. Therefore, nurses in our study are very interested in having more knowledge, as well the appropriate skills to help the patient and their relatives through difficult times. This is supported by Wallerstedt and colleagues (47), who also stressed the urgent need for education and training in palliative care because palliative care training improve knowledge, attitude, coping, and preparedness to practice (32). Therefore, palliative care education for nurses is important to change perceptions and improve knowledge (48).

Obstacles to the implementation of person-centered palliative care represent a lack of knowledge about the approach to the individual, as well as late initiation of the approach in persons with chronic non-communicable disease. These obstacles result in lower quality of life of individuals with chronic non-communicable disease and contributing symptoms of exhaustion, social isolation and loss of own self and role in society (8, 10, 46). Furthermore, the results of the studies show that early palliative care is associated with less intensive medical care, improved quality outcomes, cost saving, fewer emergency room visits and hospital deaths for outpatients in the last month of life (26, 27, 47). For that reason Gómez-Batiste and Connor (16) and the international organizations in palliative care (Chair of Palliative Care, WHO Collaborating Centre Public Health Palliative Care Programmes and Worldwide Hospice Palliative Care Alliance) propose that we need a new palliative care model that implements early treatment, introduces person-centredness for all persons with chronic non-communicable
disease, is preventative, planned in advance and integrated into all levels of health care systems (16). For these reasons, further research into person-centred palliative care is needed to determine how these principles can best be translated into effective models of delivery, informed by person-centred perspectives.

Limitations

Possible limitations of the study could be attributed to different types of questionnaire distribution between both countries where it is expected that electronic questionnaires usually result in lower response rates. An additional limitation could be the fact that we used a convenience sample and only in two countries.

Implications for palliative care providers

- Our results provide descriptive information on perception, knowledge, values, beliefs, and attitudes of early person-centred palliative care by nurses who provide palliative care to persons and their care partners.
- The results from the survey can help to draw attention to the perception, lack of knowledge and attitudes by nurses and begins to focus on the need to increase education about the concept of early person-centred palliative care for nurses.
- The better perception, knowledge and attitudes of palliative care by nurses may help persons to improve and raise their quality of life, as well as diminish stress in their care partners and improve quality of life.
- Benefits of early person-centred palliative care and effective perception, knowledge, and attitudes by nurses, helps persons and their care partners get effective management of their illness.

Conclusions

The study provided a picture of perceptions, attitudes and knowledge of palliative care between different countries. Nurses in Slovenia and Finland have different perceptions and attitudes
about palliative care but have the same knowledge. Education and training about person-centered palliative care improve additional knowledge, attitudes and perceptions of palliative care for health care professionals is needed in both countries.

Early person-centred palliative care plays an important role in holistic, integrative, individual and person-centred care and treatment of persons who have a life-threatening disease with accompanying disturbing symptoms. Palliative care has as yet been given insufficient attention in the early stages of curative treatment of persons. Experts in this field stress the importance of early involvement of person-centred palliative care in cases where disease threatens the quality of life of persons and care partners. Besides, we must be aware of increasing numbers of new cancer cases and increasing non-communicable diseases in the world's population, as well as in individual countries. With the concept of early person-centred palliative care, we can mitigate symptoms that can cause suffering to persons and encourage positive effects on quality of life. For such an approach it is important that we educate nurses in the concept of person-centred palliative care so that they are able to understand the importance of applying the principles and approaches in practice. Knowledge alone does not make for quality person-centred palliative care, but it sets the foundations for its implementation, so it is also necessary to have experience in this area. Governments should promote and support the introduction, implementation and ongoing research in the field of person-centred palliative care.
Table 1 Presentation of the descriptive statistics about the respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Slovenia (n = 220)</th>
<th>Finland (n = 220)</th>
<th>Total (n = 440)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>201 (91%)</td>
<td>206 (94%)</td>
<td>407 (93%)</td>
</tr>
<tr>
<td>Male</td>
<td>19 (9%)</td>
<td>14 (6%)</td>
<td>33 (7%)</td>
</tr>
<tr>
<td>Degree of education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>183 (83%)</td>
<td>144 (65%)</td>
<td>327 (74%)</td>
</tr>
<tr>
<td>Master</td>
<td>34 (16%)</td>
<td>66 (30%)</td>
<td>100 (23%)</td>
</tr>
<tr>
<td>Doctorate</td>
<td>3 (1%)</td>
<td>10 (5%)</td>
<td>13 (3%)</td>
</tr>
<tr>
<td>Working experience in palliative care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, I have</td>
<td>71 (32%)</td>
<td>91 (41%)</td>
<td>162 (37%)</td>
</tr>
<tr>
<td>Partly, I have</td>
<td>149 (68%)</td>
<td>129 (59%)</td>
<td>278 (63%)</td>
</tr>
</tbody>
</table>
Table 2 Mann-Whitney U test of perception of palliative care between Slovenia and Finland

<table>
<thead>
<tr>
<th>Perception of palliative care</th>
<th>Slovenia (n= 220) Mean Rank</th>
<th>Finland (n= 220) Mean Rank</th>
<th>Mann-Whitney U test</th>
<th>p value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>The nurse understands the concept of palliative care.</td>
<td>236.38</td>
<td>204.62</td>
<td>20706.5</td>
<td>0.005*</td>
</tr>
<tr>
<td>The philosophy of palliative care is compatible with curative treatment.</td>
<td>230.00</td>
<td>211.00</td>
<td>22111.0</td>
<td>0.100</td>
</tr>
<tr>
<td>The nurse has enough work experience to effectively perform palliative care.</td>
<td>241.25</td>
<td>199.75</td>
<td>19634.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>Through education a nurse receives enough knowledge about palliative care to implement it in practice.</td>
<td>225.46</td>
<td>215.54</td>
<td>23108.0</td>
<td>0.389</td>
</tr>
<tr>
<td>The nurse applies palliative care in situations, when disturbing symptoms occur in the patient.</td>
<td>173.56</td>
<td>267.44</td>
<td>13873.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>In palliative care, symptom management, family support and treatment in the terminal phase, play an important part.</td>
<td>220.86</td>
<td>220.14</td>
<td>24120.0</td>
<td>0.946</td>
</tr>
<tr>
<td>Pain management has great impact on the patient's facing a life-threatening disease.</td>
<td>208.25</td>
<td>232.75</td>
<td>21504.5</td>
<td>0.027*</td>
</tr>
<tr>
<td>In the provision of palliative care, emotional distance to the patient is required from nurses.</td>
<td>250.75</td>
<td>190.25</td>
<td>17545.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>In palliative care the nurse has a stronger tendency towards a burn-out than in other fields.</td>
<td>264.89</td>
<td>176.11</td>
<td>14434.5</td>
<td>0.001*</td>
</tr>
</tbody>
</table>

*Significant level of p<0.05
Table 3 Mann-Whitney U test of knowledge of palliative care between Slovenia and Finland

<table>
<thead>
<tr>
<th>Knowledge of palliative care</th>
<th>Slovenia (n=220) Mean rank</th>
<th>Finland (n=220) Mean rank</th>
<th>Mann-Whitney U test</th>
<th>p value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palliative care is intended only for dying patients.</td>
<td>225.96</td>
<td>215.04</td>
<td>22998.0</td>
<td>0.353</td>
</tr>
<tr>
<td>In palliative care decision-making in terms of treatment, patients and their care partner are equal members of the palliative team.</td>
<td>243.70</td>
<td>197.30</td>
<td>19095.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>The nurse is the one who talks about death with the patient and their family.</td>
<td>193.86</td>
<td>247.14</td>
<td>18339.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>The patient's family must be actively included in the process of palliative care.</td>
<td>252.21</td>
<td>188.79</td>
<td>17224.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>When the patient expresses the questions: &quot;Am I dying?&quot; Should the nurse ask: &quot;What brings you to this idea?&quot;</td>
<td>231.38</td>
<td>209.63</td>
<td>21807.5</td>
<td>0.60</td>
</tr>
<tr>
<td>When the patient expresses the questions: &quot;Am I dying?&quot; Should the nurse change the subject.</td>
<td>228.33</td>
<td>212.68</td>
<td>22478.5</td>
<td>0.162</td>
</tr>
<tr>
<td>The nurse must offer support to the family in the process of mourning and accepting the death of a loved one.</td>
<td>239.00</td>
<td>202.00</td>
<td>20131.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>Morphine is used by standard for the analgesic effect in comparison to other opioids.</td>
<td>246.32</td>
<td>194.68</td>
<td>18520.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>Adjuvant therapy is important in the treatment of chronic pain.</td>
<td>195.45</td>
<td>245.55</td>
<td>18690.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>The use of morphine on long-term basis in the treatment of chronic pain may lead to drug dependence.</td>
<td>225.12</td>
<td>215.88</td>
<td>23183.0</td>
<td>0.430</td>
</tr>
<tr>
<td>There are drugs in the terminal phase of the disease that can cause respiratory depression, suitable for the treatment of severe dyspnoea.</td>
<td>204.91</td>
<td>236.09</td>
<td>20770.0</td>
<td>0.006*</td>
</tr>
<tr>
<td>In higher doses, codeine causes more nausea and vomiting than morphine.</td>
<td>219.61</td>
<td>221.39</td>
<td>24004.5</td>
<td>0.874</td>
</tr>
<tr>
<td>Demerol is not an effective analgesic for the management of chronic pain.</td>
<td>230.15</td>
<td>210.85</td>
<td>22076.0</td>
<td>0.61</td>
</tr>
<tr>
<td>The manifestation of chronic pain is different from acute pain manifestations.</td>
<td>235.56</td>
<td>205.44</td>
<td>20887.5</td>
<td>0.007*</td>
</tr>
<tr>
<td>The pain threshold is lowered with anxiety or fatigue.</td>
<td>196.39</td>
<td>244.61</td>
<td>18895.5</td>
<td>0.001*</td>
</tr>
</tbody>
</table>

*Significant level of p<0.05
Table 4 Mann-Whitney U test of attitudes of palliative care between Slovenia and Finland

<table>
<thead>
<tr>
<th>Acceptability of palliative care</th>
<th>Slovenia (n= 220) Mean Rank</th>
<th>Finland (n= 220) Mean Rank</th>
<th>Mann-Whitney U test</th>
<th>p value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important to include palliative care in making the diagnosis of an incurable disease, which also brings disturbing symptoms.</td>
<td>249.26</td>
<td>191.74</td>
<td>17873.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>During their studies, nurses receive sufficient knowledge of palliative care.</td>
<td>202.41</td>
<td>238.59</td>
<td>20220.5</td>
<td>0.002*</td>
</tr>
<tr>
<td>The nurses ensure that the relatives can be with the palliative patient.</td>
<td>248.09</td>
<td>192.91</td>
<td>18130.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>When treating a patient in need of palliative care, it is important to work with a multidisciplinary team experienced in this field.</td>
<td>249.34</td>
<td>191.66</td>
<td>17855.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>For an effective palliative care, nurses should have knowledge and experience in palliative.</td>
<td>263.70</td>
<td>177.30</td>
<td>14695.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>The nurse in palliative care is not responsible only for one patient, but also for their close relatives.</td>
<td>245.97</td>
<td>195.03</td>
<td>18597.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>Communication is an important link in the treatment of a patient in need of palliative care.</td>
<td>254.22</td>
<td>186.78</td>
<td>16782.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>The nurse supports the patient and their care partners when they become upset due to the uncertain future.</td>
<td>246.68</td>
<td>194.32</td>
<td>18440.5</td>
<td>0.001*</td>
</tr>
<tr>
<td>Together with the patient, the nurse establishes a plan for the course of treatment and care.</td>
<td>221.48</td>
<td>219.53</td>
<td>23985.5</td>
<td>0.863</td>
</tr>
<tr>
<td>An important link in the psychological support for patients and their care partners is the psychologist.</td>
<td>269.47</td>
<td>171.53</td>
<td>13426.0</td>
<td>0.001*</td>
</tr>
<tr>
<td>The nurse finds it difficult to talk about death with the family of the patient.</td>
<td>230.54</td>
<td>210.46</td>
<td>21990.5</td>
<td>0.081</td>
</tr>
<tr>
<td>The treatment of a patient in need of palliative care requires a great amount of empathy from the nurse.</td>
<td>257.62</td>
<td>183.38</td>
<td>16033.0</td>
<td>0.001*</td>
</tr>
</tbody>
</table>

*Significant level of p<0.05