Abstract

Introduction. Comprehensive care for patients who no longer respond to treatment procedures is called palliative care. Palliative medicine does not delay or accelerate death, it promotes life, and considers dying as a normal process. In palliative medicine and care there is no place for hierarchy - teamwork, focus on the patient and respect for his autonomy are what is important.

Aim. The conducted research shows the knowledge of nurses about palliative care at the primary, secondary and tertiary levels of health care.

Methods. Prospective research in the Republic of Croatia at three levels of health care has been conducted. The sample included 150 nurses. The instrument used in the study was the Palliative Care Quiz for Nursing (PCQN).

Results. The results showed that the nurses' knowledge of palliative care is insufficient among the nursing population. Despite numerous training activities conducted over the past ten years, levels of knowledge are still lower than expected. Nurses at the primary level of health care have far greater knowledge than nurses at secondary and tertiary levels.

Conclusion. Results of the study showed the need for quality education with real-life examples in order to achieve higher levels of empathy, spread knowledge about palliative care and about the importance of care for palliative patients. It is recommended to increase the number of educational activities in small groups, in the local language, adaptable and understandable to all health professionals.
Introduction

Palliative care is an approach that improves the quality of life of a patient and his/her family who are facing problems associated with a deadly disease. The goals of palliative care are achieved through the prevention and alleviation of suffering, early recognition, flawless assessment and suppression of pain, and helping with other psychophysical, social, and spiritual problems (1,2). The establishment of palliative care in the system is one of the priorities of the Republic of Croatia and an integral part of the National Strategy for Health Development 2012-2020 (3). Palliative care offers the most basic concept of care - taking care of the patient's needs wherever he is cared for, either at home or in the hospital, because it affirms life and considers death a normal process. Palliative medicine is one of the newest subspecialty branches of modern medicine. The main centre of interest of palliative medicine is caring for patients in the final stage of life, where curative medicine can no longer make patients healthy (4, 5). The health care system should be oriented towards patients and citizens who should without a doubt participate in decisions concerning their health. Respecting and protecting the patient in the final stage of life includes, above all, ensuring adequate care in the appropriate environment, so that he or she can die with dignity (6,7). Death is easy to recognize, but difficult to define because it is one of the phenomena in medicine that has not been sufficiently researched. Very often there is a debate about decisions on one's end of life, and legal, as well as ethical issues, are raised (8). Even in the worst situation, a person is left with that ultimate freedom, and that is the choice of a point of view. If we accept suffering as a task, if we find meaning in it, then we are saved from despair because “he who knows why can deal with almost every how.” It is true that old people have no opportunities in the future, but they do have more than that. Instead of opportunities in the future, they have accomplishments in the past, opportunities they have actualized, meaning they have fulfilled, values they have accomplished and no one and nothing can take those values away from the past. As for the possibility of finding meaning in suffering, the meaning of life is an unconditional one (9,10). By reviewing the scientific and professional literature, we can confirm that in the Republic of Croatia there is not a sufficient number of conducted research on the topic of knowledge about palliative care, in contrast to many conducted research in the world. It is very important to address the issue of patients in need of palliative care, to improve knowledge and provide a dignified death. The research was conducted to highlight the importance of a high level of knowledge about palliative care and care for the patients who need it.

Aim

The aim of this paper was to present the level of knowledge of nurses at primary, secondary and tertiary levels of health care about palliative care.

Specific aims:

1. Determine if there are differences in the knowledge of nurses in relation to primary, secondary and tertiary levels.
2. Determine if there are differences in the knowledge of nurses with regard to age, education and years of service.

Hypothesis

**H1:** At the tertiary level of health care, nurses have received more formal and informal training on palliative care than nurses at the primary and secondary level of health care.

**H2:** Nurses/technicians from the primary level of health care have more knowledge about palliative medicine and care than nurses at the tertiary and secondary level of health care.

Methods

The sample included 150 participants, 50 participants (33.3%) from two Health Centres (HC) - Health Centre East with 25 participants and Health Centre with 25 participants, 50 participants (33.3%) from County Hospital Čakovec (CHC) and 50 participants (33.3%) from the University Hospital Centre Zagreb (UHCZ). The time period in which the research was conducted was from 30 February 2020 - 30 June 2020. The questionnaire was com-
completed by 150 nurses. Of these, 136 were women (90.7%) and 14 were men (9.3%). With regard to age, 46 (30.7%) participants were aged between 35 and 44 years, and 42 (28%) participants were aged between 25 and 34 years. 66 (44%) participants are nurses who completed secondary school or have a bachelor’s degree in nursing, while 18 (12%) participants have a master’s degree or are graduate nurses. The study used a PCQN (Palliative Care Quiz for Nursing, Ross et al. 1996) questionnaire consisting of 20 questions developed by Margaret M. Ross and colleagues from the University of Ottawa, Canada, and its purpose was to examine the knowledge of nurses on palliative care (11). In order to verify the factor structure of the PCQN questionnaire and the justification of the formation of one domain based on a set of selected items (k = 20), exploratory factor analysis was performed using principal components analysis with direct oblimin rotation. The value of the Kaiser-Meyer-Olkin test is 0.638 which is more than the recommended value of 0.6. The Bartlett sphericity test is significant (p < 0.001) indicating the factorability of the correlation matrix. According to the Guttman-Kaiser criterion (characteristic root greater than 1), the existence of as many as seven components was determined, which explain a total of 57% of the variance, but most of these factors explained only a small part of the total variance, and because of the content of items, which were not interpretable or meaningfully distributed in these factors, we retained one factor that explains 15.4% of the variance. Likewise, one of the limiting factors is the sample size which determines that we can only consider components with a factor load of 0.45 and higher (12). After that, the analysis of the main components with oblimin rotation was repeated. According to the Guttman-Kaiser criterion, one factor was determined that explains a total of 15.4% of the variance. After the one-factor structure of the PCQN questionnaire was determined, the reliability of the questionnaire was analyzed. The internal reliability coefficient of the whole Cronbach Alpha scale is 0.691, which means that it represents an acceptable level of reliability in the research (Cronbach Alpha values > 0.6).

Statistics

Categorical data are presented in absolute and relative frequencies. Differences in categorical variables were tested by the χ² test and, if necessary, by Fisher’s exact test. Numerical data are described by the median and limits of the interquartile range. Differences in numerical variables between the two independent groups were tested by the Mann Whitney U test, and between the three independent groups by the Kruskal Wallis test. The significance level was set to p = 0.05 (x, y) (13). MedCalc Statistical Software version 19.1.7 (MedCalc Software Ltd, Ostend, Belgium; https://www.medcalc.org; 2020) and SPSS (IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.) were used for statistical analysis (14).

Results

There were 136 female participants (90.7%), and a significant number of these women are employed at a Health Centre (Fisher’s exact test, p = 0.007). 66 (44%) participants are nurses who completed secondary school or have a bachelor’s degree in nursing, while 18 (12%) participants have a master’s degree or are graduate nurses, without significant difference in relation to institutions. Most participants, 44 of them (29.3%) have between 21 and 30 years of service, and the fewest of them have between 16 and 20 years of service. With years of service of up to 5 years, there are significantly more participants from the University Hospital Centre, 12 of them (24%), in the County Hospital there are significantly more participants with 31 years or more years of service - 13 of them (26%) (χ² test, p = 0.04) (Table 1).
Table 1. **Gender, age, professional status and years of service in relation to the institution in which participants work**

|                       | HC   | CH   | UHC  | Total | p     |
|-----------------------|------|------|------|-------|-------|
| **Number (%)**        |      |      |      |       |       |
| **Gender**            |      |      |      |       |       |
| Men                   | 0    | 8 (16)| 6 (12)| 14 (9.3) | 0.007 |
| Women                 | 50 (100) | 42 (84) | 44 (88) | 136 (90.7) |       |
| **Age of respondents (years)** |      |      |      |       | 0.42* |
| 18 - 24               | 7 (14)| 2 (4)| 7 (14)| 16 (10.7) |       |
| 25 - 34               | 9 (18)| 19 (38)| 14 (28)| 42 (28) |       |
| 35 - 44               | 15 (30)| 16 (32)| 15 (30)| 46 (30.7) |       |
| 45 - 54               | 10 (20)| 7 (14)| 8 (16)| 25 (16.7) |       |
| 54 and more           | 9 (18)| 6 (12)| 6 (12)| 21 (14) |       |
| **Total**             | 50 (100) | 50 (100)| 50 (100)| 150 (100) |       |
| **Number (%)**        |      |      |      |       |       |
| **Professional status** |      |      |      |       | 0.07  |
| Nurses with secondary education | 25 (50) | 25 (50) | 16 (32) | 66 (44) |       |
| Bachelor’s degree in nursing | 21 (42) | 16 (32) | 29 (58) | 66 (44) |       |
| Master’s degree/Graduate nurse | 4 (8) | 9 (18) | 5 (10) | 18 (12) |       |
| **Years of service**  |      |      |      |       | 0.04  |
| 0 - 5                 | 9 (18)| 9 (18)| 12 (24)| 30 (20) |       |
| 6 - 10                | 5 (10)| 10 (20)| 4 (8)| 19 (12.7) |       |
| 11 - 15               | 6 (12)| 7 (14)| 8 (16)| 21 (14) |       |
| 16 - 20               | 7 (14)| 2 (4)| 7 (14)| 16 (10.7) |       |
| 21 - 30               | 10 (20)| 19 (38)| 15 (30)| 44 (29.3) |       |
| 31 and more           | 13 (26)| 3 (6)| 4 (8)| 20 (13.3) |       |
| **Total**             | 50 (100) | 50 (100)| 50 (100)| 150 (100) |       |

Note: HC – Health Centre; CH – County Hospital; UHC – University Hospital Centre

*χ² test
There are 38 (25.3%) participants from the cardiology department, 23 (15.3%) participants from the general practitioner’s practice or from the neurology department, 17 of them (11.3%) are from the community nursing service, 15 (10%) from the pulmonary diseases department, and 12 (8%) participants from the oncology department, while a smaller number of participants are from other departments (nephrology, liver diseases department, gynaecology ambulatory clinic, ophthalmology ambulatory clinic, pediatric ambulatory clinic, internal medicine ambulatory clinic and palliative care department).

In everyday work, 128 (85.3%) participants encounter patients in need of palliative care, and this happens significantly more often for the participants employed in the University Hospital Centre - 48 of them (96%), compared to the participants from the Health Centres or the County Hospital. ($\chi^2$ test, $p=0.003$). During their regular education, 126 (84%) participants took courses about palliative care, 68 (45.3%) participants underwent informal palliative care education, and 130 (87.2%) stated that palliative care education would help them in working with their patients. There is no significant difference in education (formal and informal) and the importance of education in relation to the institution in which they are employed (Table 2).

Knowledge of palliative care (PCQN questionnaire)

False statements that palliative care is appropriate only in situations where there is an evident worsening of the disease and deterioration were answered correctly by 104 (69.3%) participants: 117 (78%) participants answered that it is incorrect that men cope with grief more easily than women, and 135 (90%) participants answered that it is incorrect that suffering and physical pain are one and the same. To a true statement that the manifestation of chronic pain differs from that of acute pain, 122 (81.3%) participants answered correctly. A few participants - 28 (18.7%) of them, know that medicines that can cause respiratory depression are suitable for the treatment of severe dyspnea in the terminal phase of the disease, and 30 (20%) of them know that the statement that it is easier to bear the loss of a person with whom we are not close than with a loss of a close person is incorrect. Most participants, 71 (47.3%) of them, did not know the answer to the statement that in large doses codeine causes more nausea and vomiting than morphine; 68 of them (45.3%) did not know the answer to the statement that Dolatin is not an effective drug in the treatment of chronic pain, and 56 (37.3%) of them did not know whether the philosophy of palliative care is compatible with treatment activities (Table 3).

| Table 2. Distribution of participants according to whether they work with patients in need of palliative care, according to the current education on palliative care and the benefits of education on palliative care in relation to the institutions in which they work |
|---------------------------------------------------------------|
|                                                                 |
| |       | HC   | CH   | UHC  | Total | $p^*$ |
|---------------------------------------------------------------|
| They encounter patients in need of palliative care in their daily work | 36 (72) | 44 (88) | 48 (96) | 128 (85.3) | 0.003 |
| During their education, they took courses in palliative care  | 42 (84) | 41 (82) | 473 (86) | 126 (84) | 0.86 |
| They underwent informal education on palliative care           | 21 (42) | 27 (54) | 20 (40) | 68 (45.3) | 0.32 |
| Palliative care education would help them work with their patients | 39 (79.6) | 45 (90) | 46 (92) | 130 (87.2) | 0.14 |

Note: HC – Health Centre; CH – County Hospital; UHC – University Hospital Centre

$p^*$ $\chi^2$ test
Table 3. **Answers to questions related to palliative care**

| Statement                                                                 | Number (%) of participants |
|---------------------------------------------------------------------------|----------------------------|
| **Correct**                                                              | **Incorrect**              | **I do not know** | **Total** |
| Palliative care is appropriate only in situations where disease exacerbation and deterioration is evident | 42 (28)                    | 104 (69.3)        | 4 (2.7)   | 150 (100) |
| Morphine is the standard used to compare the analgesic effect of other opioids | *49 (3.7)                  | 61 (40.7)         | 40 (26.7) | 150 (100) |
| The extent of the disease determines how the pain is treated             | 86 (57.3)                  | *53 (35.3)        | 11 (7.3)  | 150 (100) |
| Adjuvant therapy is essential in the treatment of pain                    | *75 (50)                   | 24 (16)           | 51 (34)   | 150 (100) |
| It is very important that family members are with the patient when death occurs | 122 (81.3)                | *11 (7.3)        | 17 (11.3) | 150 (100) |
| In the last days of one’s life, drowsiness associated with electrolyte imbalance reduces the need for sedation | *65 (43.3)                 | 62 (41.3)         | 23 (15.3) | 150 (100) |
| Addiction is a major problem with prolonged use of morphine in the treatment of pain | 93 (62)                    | *40 (26.7)        | 17 (11.3) | 150 (100) |
| People who take opioids must also take laxatives                           | *73 (48.7)                 | 40 (26.7)         | 37 (24.7) | 150 (100) |
| Providing palliative care requires emotional detachment                    | 86 (57.3)                  | *43 (28.7)        | 21 (14)   | 150 (100) |
| Drugs that can cause respiratory depression are suitable for the treatment of severe dyspnea in the terminal phase of the disease | *28 (18.7)                 | 89 (59.3)         | 33 (22)   | 150 (100) |
| Men cope with grief more easily than women                                | 21 (14)                    | *117 (78)        | 12 (8)    | 150 (100) |
| The philosophy of palliative care is compatible with treatment activities | *52 (34.7)                 | 42 (28)           | 56 (37.3) | 150 (100) |
| The use of placebo is appropriate in the treatment of some types of pain  | 102 (68)                   | *34 (22.7)        | 14 (9.3)  | 150 (100) |
| In large doses, codeine causes more nausea and vomiting than morphine     | *47 (31.3)                 | 32 (21.3)         | 71 (47.3) | 150 (100) |
| Suffering and physical pain are one and the same                           | 11 (7.3)                   | *135 (90)         | 4 (2.7)   | 150 (100) |
| Dolantin is not an effective drug in the treatment of chronic pain         | *35 (23.3)                 | 47 (31.3)         | 68 (45.3) | 150 (100) |
| Burnout due to the accumulation of losses is inevitable for those working in palliative care | 79 (52.7)                  | *36 (24)          | 35 (23.3) | 150 (100) |
The manifestation of chronic pain is different from that of acute pain  
*122* (81.3) 21 (14) 7 (4.7) 150 (100)

Losing a person we are not close to is easier to bear than losing a close person  
116 (77.3) *30* (20) 4 (2.7) 150 (100)

Anxiety or fatigue lowers the pain threshold  
*42* (28) 93 (62) 15 (10) 150 (100)

Note: *Correct answers*

### Table 4. Knowledge of palliative care with regard to the characteristics of the participants

| Institution                        | Median (interquartile range) | Minimum - maximum of correct answers | P* |
|------------------------------------|------------------------------|--------------------------------------|----|
| Health Centre                      | 8 (6-10)                     | 2 - 13                               |    |
| County Hospital                    | 8 (6-8)                      | 3 - 14                               | 0.08|
| University Hospital Centre         | 8 (7-10)                     | 3 - 13                               |    |

| Age of participants (years)        | Median (interquartile range) | Minimum - maximum of correct answers | P* |
|------------------------------------|------------------------------|--------------------------------------|----|
| 18 - 24                            | 7 (6-8)                      | 2 - 11                               |    |
| 25 - 34                            | 8 (6-10)                     | 3 - 13                               |    |
| 35 - 44                            | 8 (6-10)                     | 3 - 14                               | 0.49|
| 45 - 54                            | 9 (6-10)                     | 4 - 13                               |    |
| 54 and more                        | 8 (6-9)                      | 4 - 12                               |    |

| Professional status                | Median (interquartile range) | Minimum - maximum of correct answers | P* |
|------------------------------------|------------------------------|--------------------------------------|----|
| Nurses with secondary education    | 8 (6-9)                      | 2 - 13                               |    |
| Bachelor’s degree in nursing       | 8 (6-10)                     | 3 - 13                               | 0.25|
| Master’s degree/ Graduate nurse    | 9 (7-11)                     | 3 - 14                               |    |

| Years of service                   | Median (interquartile range) | Minimum - maximum of correct answers | P* |
|------------------------------------|------------------------------|--------------------------------------|----|
| 0 - 5                              | 7 (6-9)                      | 2 - 12                               |    |
| 6 - 10                             | 8 (6-10)                     | 3 - 13                               |    |
| 11 - 15                            | 7 (6-10)                     | 4 - 14                               | 0.97|
| 16 - 20                            | 8 (6-11)                     | 4 - 13                               |    |
| 21 - 30                            | 8 (7-9)                      | 3 - 13                               |    |
| 31 and more                        | 8 (5-10)                     | 4 - 13                               |    |

Note: *Kruskal Wallis test*
Out of a total of 20 correct answers that participants could have, the range of correct answers in our sample was from a minimum of 2 to a maximum of 14 correct answers, with a median of 8 (interquartile range from 6 to 9 correct answers). There is no significant difference in the number of correct answers with regard to the characteristics of the participants (Table 4).

Participants who encounter patients in need of palliative care in their daily work have significantly more correct answers, median 8 (interquartile range from 6 to 10) compared to participants who do not encounter patients in need of palliative care (Mann Whitney U test, \( p = 0.004 \)). There is no significant difference in the number of correct answers as to whether or not participants received formal or informal palliative care education. The criterion of sufficient knowledge was determined by the author of the questionnaire Ross et al. to 75% accuracy, while in 2016 Lovrić lowered these criteria to 50% accuracy due to research needs. The questions in the questionnaire relate to the philosophy of palliative care, psychological and spiritual issues, and the control of pain and other symptoms. The questionnaire is intended to check the basic knowledge of nurses about palliative care, and the possible answers are: Correct, Incorrect and I do not know. The authors scored the questionnaire in such a way that each respondent received one point for the answer Correct, and for the answers Incorrect and I do not know, he/she received zero points. Therefore:

- „Good knowledge“ - >75% accuracy (15/20)
- „Sufficient knowledge“ - >50% accuracy (10/20) (15).

### Table 5. Sufficient knowledge of palliative care in relation to the characteristics of the participants

| Number (%) of participants according to knowledge | Not sufficient knowledge | Sufficient knowledge | Total | \( p^* \) |
|---------------------------------------------------|--------------------------|----------------------|-------|----------|
| **Institution**                                   |                          |                      |       |          |
| Health Centre                                    | 34 (30)                  | 16 (43)              | 50 (33)| 0.04     |
| County Hospital                                  | 44 (39)                  | 6 (16)               | 50 (33)|          |
| University Hospital Centre                       | 35 (31)                  | 15 (41)              | 50 (33)|          |
| **Professional status**                          |                          |                      |       |          |
| Nurses with secondary education                  | 53 (47)                  | 13 (35)              | 66 (44)| 0.40     |
| Bachelor’s degree in nursing                     | 48 (42)                  | 18 (49)              | 66 (44)|          |
| Master’s degree/ Graduate nurse                  | 12 (11)                  | 6 (16)               | 18 (12)|          |
| **Years of service**                             |                          |                      |       |          |
| 0 - 5                                            | 23 (20)                  | 7 (19)               | 30 (20)| 0.78     |
| 6 - 10                                           | 14 (12)                  | 5 (14)               | 19 (13)|          |
| 11 - 15                                          | 14 (12)                  | 7 (19)               | 21 (14)|          |
| 16 - 20                                          | 11 (10)                  | 5 (14)               | 16 (11)|          |
| 21 - 30                                          | 36 (32)                  | 8 (22)               | 44 (29)|          |
| 31 and more                                      | 15 (13)                  | 5 (14)               | 20 (13)|          |
| **Total**                                        | 113 (100)                | 37 (100)             | 150 (100)|        |

Note:*\( \chi^2 \) test
Significantly more sufficient knowledge have the participants who meet patients in need of palliative care in their daily work, 36 of them (97.3%) (Fisher’s exact test, p=0.02), while according to formal and non-formal education there is no significant difference in the amount of knowledge about palliative care. According to the number of correct answers, we divided the participants into two groups: a group of participants who do not have enough knowledge (less than 10 correct answers), 113 of them, and a group of participants with sufficient knowledge, 37 of them (24.7%) (Table 5).

Discussion

Based on the conducted research, it is concluded that the knowledge of nurses caring for patients in need of palliative care should be far greater, given that numerous training activities on this topic have been conducted over the past ten years. The conducted research found that 128 participants had taken courses on palliative care and medicine, and 68 had undergone informal education. There is no significant difference in education (formal and informal) and the importance of education in relation to the institution in which they are employed, which cannot confirm the first hypothesis. Mann Whitney U test proved that participants who encounter patients in need of palliative care on a daily basis have greater knowledge than participants who do not encounter patients in need of palliative care in their work. From the above results (Tables 4 and 5) it is evident that there is no significant difference in knowledge between nurses at the primary and tertiary level of health care, therefore, the second hypothesis has not been confirmed. Knowledge of palliative medicine is the most important component in providing palliative care. Participants, 93 (62%) of them, answered that addiction is a major problem with long-term use of morphine in the treatment of pain, while 102 (68%) of them answered that placebo is suitable in the treatment of some types of pain, which leads to the conclusion that in four different health institutions at three levels of health care, knowledge about the treatment of symptoms is insufficient. Previous research indicates a lack of nurses’ knowledge on palliative care, especially on pain control, use and side effects of opioids, the principles and use of palliative care and the identification of palliative patients, which is unfortunately proven by more recent research (15 - 17). Over the years, pain management issues have become a priority, but there is very little data on pain assessment and analgesics use. It is also necessary to address the question: “The loss of a person with whom we are not close is easier to bear than the loss of a close person.” The author of the questionnaire indicated “incorrect” as the answer, but the main determinant of the intensity of grief is closeness. Every loss is a difficult and unpleasant experience no matter whether it is a close person or a patient we cared for. Every person needs to find meaning in loss. In times when people lived in more harmony with nature, people could more easily accept dying as a natural process like any other. Until just a hundred years ago, death was not an enigma except in the sense that death will always remain somewhat mysterious. People died in the presence of the whole family, in prayer and the hope of meeting again in heaven, which unfortunately today we cannot confirm to be so. Very often patients in need of palliative care do not die in the comfort of their home or in the presence of family and loved ones precisely because of a lack of knowledge about palliative care and care for patients in need of it (17). The need for palliative care is growing with age, and the population in the Republic of Croatia is getting older. In order to improve the knowledge of nurses about palliative care, in addition to the numerous training activities held on this topic, it is necessary to invite professionals from different backgrounds who are in direct contact with palliative patients to recount from their own experience the situations they encounter every day. Perhaps such experience would begin to change the image and vision of students about palliative care. In addition to nurses who meet patients in need of palliative care, it is necessary to invite patients or families to practical classes who would like to tell their life story and through emotions, they convey, raise awareness of seriously ill people who need to be provided with a quality life. The research should be repeated every year and the obtained results should be publicly presented. According to the results of various recent studies, the importance of a high level of knowledge about palliative medicine and care for patients in need of palliative care can be determined. Regardless of the negative results of this research, hope is placed into numerous educa-
tional activities that take place on the topic of palliative medicine. There is no significant difference in the number of correct answers in relation to the characteristics of the participants, but participants employed in Health Centres and University Hospital Centre have more knowledge about palliative care than participants working in the County Hospital. The disadvantage of this research is the insufficient number of male participants in order to compare knowledge by gender, and the insufficient number of highly educated nurses to compare knowledge by the level of education and the large difference in the number of participants by the department. It would also be interesting to prospectively monitor health professionals when and how they change their attitudes about palliative care through a longitudinal study. Time goes by and palliative medicine progresses, and the need for palliative care increases. It is positive that nurses show compassion, not fear when it comes to caring for patients in need of palliative care. “I dream of people who do not see death as horror and their defeat but as the greatest point and end of this earthly life. I dream of people who give the gravely ill the opportunity to die in the place where they lived, to close their eyes at home and be surrounded by family. I dream of people who possess humanity.” (unknown author)

Conclusion

Comprehensive care for patients who no longer respond to treatment procedures is called palliative care. Palliative care encompasses the community, the family and the patient and is interdisciplinary in its approach. The development of palliative medicine in the 1960s in the UK and the 1970s in the US and Canada began precisely as a reaction to changes in medical culture and was prompted by several outstanding visionaries and historical figures in medicine. In the Republic of Croatia, the legal framework for the organization of palliative care was created in 2003 with the entry into force of the new law on health care. In the Republic of Croatia, the process of establishing a palliative care system in all elements of the health care system is underway, according to the National Palliative Care Development Program 2017-2020. Inaccessible and unorganized palliative care opens the possibility of thinking about euthanasia. Life and death are two inseparable parts of human reality and, in addition to the art of living, there is also the art of dying. The fear of death overwhelms anyone who is in imminent danger of death. It is especially emphasized in those who are not surrounded by the kindness and attention of close people. Nurses play a key role in a multidisciplinary team, and it is very important that they have a large amount of knowledge about this domain. It is necessary to conduct more frequent education on palliative care and emphasize the importance of caring for a palliative patient, and this research could encourage this.

Given the results obtained by this research, we conclude that respondents are aware of the importance of a high level of knowledge about palliative medicine and palliative care, but that education needs to be conducted more often in a language they understand. Many studies prove that it is necessary to pay attention to psychological professionals and provide psychological support because everyone has a hard time dealing with death and dying, be it a close person or patients they meet. Numerous educational activities would bring the level of knowledge about palliative medicine and care to a higher level and would improve the quality of providing adequate care to patients, families and loved ones.

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Sažetak

Uvod. Sveobuhvatnu brigu za bolesne koji više ne reagiraju na postupke liječenja nazivamo palijativnom skrbi. Palijativna medicina ne odgada niti ubrzava smrt, ona promiče život, a umiranje smatra normalnim procesom. U palijativnoj medicini i skrbi nema mjesta za hijerarhiju, važan je timski rad, fokus na bolesnika i poštivanje njegove autonomije.

Cilj. Provedeno istraživanje prikazuje znanje medicinskih sestara i tehničara o palijativnoj skrbi na primarnoj sekundarnoj i tercijarnoj razini zdravstvene zaštite.

Metode. Provedeno je prospektivno istraživanje na području Republike Hrvatske na tri razine zdravstvene zaštite. U studiju je uključeno 150 ispitanika, a u istraživanju je primijenjen instrument PCQN (Palliative Care Quality Network, 1996.), anketni upitnik koji su izradile Margaret M. Ross i suradnice sa Sveučilišta ottawa u Kanadi, koji je hrvatskom jeziku prilagodila Sandra Lovrić.

Rezultati. Rezultati provedenog istraživanja pokazuju kako je znanje medicinskih sestara i tehničara o palijativnoj skrbi nedostatno bez obzira na brojne edukacije koje se provode unazad deset godina, ali da daleko veće znanje imaju medicinske sestre i tehničari na primarnoj razini zdravstvene zaštite nego na sekundarnoj i tercijarnoj.

Zaključak. Prema rezultatima provedenog istraživanja možemo zaključiti da je potrebno provoditi kvalitetnije edukacije s primjerima iz stvarnog života kojima je cilj postizanje veće razine empatije, širenja znanja o palijativnoj skrbi i važnosti brige za palijativne bolesnike. Preporuka je povećanje broja edukacija u manjim grupama, na lokalnom jeziku, prilagodljivo i razumljivo svim zdravstvenim djelatnicima. Edukaciju moraju provoditi visokoobrazovani ljudi iz područja palijativne medicine i skrbi, kao i zdravstveni djelatnici koji rade na navedenom području.

Ključne riječi: palijativna medicina, palijativna skrbi, palijativni bolesnik