# An Increasing Older Population Dictates the Need to Organise Palliative Care and Estabilish Hospices

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## ABSTRACT

The aim of this study is to assess population needs for the organisation of palliative care and establishment of hospices. An opinion poll was created to investigate these needs. The research was carried out in 2007/2008 among 1564 citizens not working in health services, and 789 health service workers – a total of 2353 people questioned in 7 towns of the Republic of Croatia. The significant results obtained using adequate statistical methods confirm that 90.6% of all respondents favour the introduction of a palliative care system and 88% favour the establishment of hospices. This leads us to conclude that the need to establish a palliative care system and hospices has been recognised by citizens and health service workers, thus their implementation in the Republic of Croatia without further delay should be recommended.

Key words: palliative care, hospice, implementation in the health service, Croatia

# Introduction

According to the data World Health Organisation<sup>1</sup> published in 2004, life expectancy in Europe and the rest of the world is constantly increasing, as well as the percentage of the population older than 65 years of age. The average life expectancy of Europeans is 79 years for women and 71 years for men. These data confirm that increasing numbers of people are dying at an older age, most from chronic diseases, which are connected with many physical, psychological, social and ethical problems in the last, terminal phase of their illness. One well-founded and proven model for care at the end of life is palliative care.

The World Health Organisation (WHO) issued its definition of palliative care in 2002: »Palliative care is an approach that improves the quality of life for patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual«<sup>2</sup>.

The WHO has justifiably claimed that palliative care has been largely neglected in many countries around the world. The health services of most countries offer a low level of training for health professionals, and a narrow choice of options for the care of patients, while budgets and support for research from the domain of palliative care and medicine are minimal or completely lacking<sup>3</sup>.

The Republic of Croatia, a transitional Mediterranean country in the south-east of Europe, is one such country. Although there is no excuse for failing to develop a palliative care system, it is worth remembering that in the period from 1990-1995 this European country was under attack and exposed to the ravages of war. In addition to material devastation, economic damage and human casualties, the war contributed to a further lowering of the standard of living. Most Croatian citizens were faced with material poverty and financial insecurity. With meagre financial support provided by the state, the existing health service could barely deliver even its most basic elements, let alone the palliative care which was probably most needed in that period. At the beginning of this century, Croatia entered a new phase of its development in terms of socio-economic and health affairs. Today, the country faces the challenges of transition, and economic and social changes also determine the changes in the health sector<sup>4</sup>. Some of these changes apply to the implementation of palliative care within the health service of the Republic of Croatia, which at the moment does not possess the resources required to satisfy the needs of palliative care. In addition, Croatia still lacks scientific, professional and practical training with respect to palliative medicine and palliative care.

Despite having to deal with the war circumstances mentioned above, Croatia still recognised and understood the problem as early as 1994. This is confirmed by the fact that the hospice movement started its educational work with the First Croatian Symposium on Hospices and Palliative Care and with the founding of the Croatian Society for Palliative and Hospice Care within the Croatian Medical Association<sup>5</sup>.

Well aware of the situation, Croatian health workers have been organising conferences, symposiums and seminars since 1994 until today with the aim of raising more interest amongst the wider medical and non-medical public for this important form of providing professional help to terminally ill patients and their families. Since then, there were numerous symposiums, conferences, a postgraduate study for chronic pain and several types of courses (for primary health care, nurses, as well as for the staff of homes for elderly people and non-medical volunteers). For the last six years, Zagreb Health College (Zdravstveno veleučilište) has offered Palliative Care as an optional subject. In 2004, the first undergraduate lecture was held in Zagreb Medical School (Medicinski fakultet u Zagrebu) within the English medical study. In collaboration with the University of Kent, Croatia has been included in the study for the certificate in palliative care as a module and long-distance learning study under the leadership of David Oliver, visiting professor at the Zagreb Medical School<sup>6</sup>. In addition to the activities mentioned, which were of a solely educational character, organised house calls were introduced as the only practical form of palliative and hospice care in the Republic of Croatia, but only in its capital - Zagreb. In 2002, the Regional Hospice Centre was founded as an institution with both educational and practical functions. However, the fact that this centre was founded by a non-governmental organisation (NGO), which is a rather unstable civil association, and that mainly volunteers work there, shows how seriously the state and its government understand

The initiative for organising palliative care in the Republic of Croatia is also based on the demographic data that undoubtedly show an increased percentage of elderly people in the country's overall population (16.7% older than 65 years, which gives Croatia the attribute of an »old nation« according to the parameters of the United Nations<sup>7</sup>) and a growing share of single households, as well as on data that suggest an increasing number of people are suffering or dying from malignant and other chronic diseases (284.8/ 100 000)<sup>8</sup>.

The legal framework for organising palliative care in the Republic of Croatia was created in July 2003 when the new Health Care Law came into force. In this law, palliative care was listed as one of the health care measures (Article 8) and included in the primary level of health care (Article 25). In addition, the law included palliative care in the activities of public health departments (Domovi zdravlja – Article 69), prescribing that each public health department in the Republic of Croatia must include an institution for palliative care<sup>9</sup>. Today, almost five years after that law came into force, palliative care has still not been included in the system of compulsory health insurance, no standards and norms have been determined, and – most importantly – there is no national health policy for palliative care.

As a transitional country expecting to enter the European Union soon, Croatia has given great attention to Recommendation REC (2003) 24 of the Committee on Ministers of the Council of Europe to member states on the organisation of palliative care, adopted by the Committee of Ministers on 12 November 2003, recommending that the governments of member states adopt the policies, legislative and other measures necessary for a coherent and comprehensive national policy framework for palliative care<sup>10</sup>.

According to the data from the World Health Organisation, the share of total costs for health care in the gross domestic product of individual countries amounts to 1%–14%, depending on the level of development of the country and its way of financing health care. The percentage of health consumption in the gross domestic product of the Republic of Croatia amounts to ca. 9%, which means that Croatia does not fall significantly behind the old EU members, who spend an average of 8.8% of GDP on health services<sup>11</sup>.

The economical and political aspects of health care reform require more careful management because the entire population will be affected by it. On the macroeconomic level, health care is financed with a high percentage of state health insurance and a very low percentage of the state budget. Most health care costs in the Republic of Croatia are financed from public sources (taxes, compulsory contributions), while a minor part comes from private sources (direct payments for health services, private health insurance) and through various donations. The basic source of financing is compulsory health insurance, which pays the contractual health services in accordance to contracts with health institutions and private health workers.

Prior to the inclusion of palliative care in any level of health care, it is necessary to assess the needs for this activity.

A rough assessment of the need for palliative care can be made on the basis of the survey that was carried out among Croatian citizens and health workers concerning implementation of palliative care within the health service of the Republic of Croatia. The aims of the study are: 1. To determine to what extent Croatian citizens are satisfied with the existing organisation of the health care system in their respective towns with regard to providing adequate care to terminal patients. 2. To determine to what extent state hospitals in the respective towns take care of terminal patients. 3. To determine to what extent Croatian citizens and health workers need the provision of palliative care. 4. To determine to what extent Croatian citizens and health workers need hospices established in their respective towns.

# **Subjects and Methods**

The research was carried out in seven Croatian cities (Dubrovnik, Gospić, Osijek, Rijeka, Split, Šibenik, Zagreb) on a total of 2 353 interviewees. The study included 1564 non-health workers (71%; 62.5% female) and 789 (29%; 78.6% female) health care workers. The cities selected represent major cities of the 7 biggest Croatian counties, as well as the cities with the highest ratio of older population. The non health care workers population was selected randomly, while the health care workers were selected to capture physicians, nurses, lab-technicians and engineers who mostly serve elderly and/or terminally ill patients.

The basic method of this research is opinion poll. Two types of anonymous questionnaire were used: one for non-health workers, and one for health workers, who were divided into two test groups, according to the questionnaires – test group 1: non-health workers and test

group two 2: health workers (Tables 1 and 2). The study was conducted from May 2007 until February 2008. The questionnaire was distributed and collected by the authors and respondents administered it to themselves.

The introductory part of the questionnaire contains information about the anonymity of the opinion poll and the reason why it is being conducted (for the writing of a doctoral thesis). The next part of the questionnaire contains socio-demographic data about the gender, age group, level of education, employment, number of generations living in the same household as the interviewee, and the number of years of work in health care (in the questionnaire for health care workers). The two types of anonymous questionnaire concur, except for the third part. For the non-health care workers, the third part of the questionnaire contains 26 items, while for the health-care workers it contains 24 items. In both questionnaires the items address attitude to the need for palliative care system and establishment of the hospice, with addition of two questions in the non-health care workers type on the attitude on the treatment of terminally ill patient in Croatian health care institutions. In the design of the items, the attempt was made to create them sufficiently neutral, in order to avoid the introduction of bias in the responses. The interviewees specify their level of agreement to each statement using the 5-level Likert scale: 1.

TABLE 1	
DEMOGRAPHIC DATA FOR CITIZENS	

	Gender			Educ	Age	m . 1		
-	male	female	low	middle	higher	high	С	Total
Dubrovnik	89	111	42	49	57	52	43	200
Gospić	52	98	31	42	35	42	47	150
Osijek	91	109	27	62	45	66	39.5	200
Rijeka	54	113	40	67	43	17	50	167
Split	72	128	58	44	53	45	56	200
Šibenik	64	83	38	48	29	32	52	147
Zagreb	164	336	119	122	105	154	47	500
Total	586	978	355	434	367	408	47	1564

TABLE 2
DEMOGRAPHIC DATA FOR HEALTH WORKERS

	Gender			Ту	pe of health worker		Age	Total
	male	female	doctor	nurse	lab technician/engineer	other	other C	
Dubrovnik	17	83	8	74	1	17	36	100
Gospić	20	30	29	16	3	2	45.5	50
Osijek	19	81	24	67	3	6	37	100
Rijeka	21	68	24	44	1	20	32	89
Split	27	73	31	54	2	13	37.5	100
Šibenik	13	37	16	30	0	4	41	50
Zagreb	52	248	45	200	15	40	36	300
Total	169	620	177	485	25	102	37	789

strongly disagree, 2. mostly disagree, 3. I don't know, I don't have an opinion, 4. mostly agree, 5. completely agree.

## Protection of human subjects

Participation was voluntary and anonymous. Procedures to ensure confidentiality of data were included. The Ethics Committee of the School of Medicine – University of Rijeka authorised the use of the questionnaire for the purpose of this research.

## Statistical data processing

The data obtained in this research are shown in absolute and relative frequencies. For the variable "age", a median was used as the measure of central tendency. All statistical analyses were carried out using the *Statistika* 7.1 statistical package.

## Results

The results obtained by processing statistical data and analysing responses given by the non-health and health professionals questioned in 7 Croatian towns (Table 3) confirm the need amongst Croatian citizens and health workers for the organisation of a palliative care system and the establishment of hospices. The need to

TABLE 3
TOWN SIZES

Town	Number of inhabitants
Dubrovnik	43.770
Gospić	12.980
Osijek	114.616
Rijeka	144.043
Split	188.694
Šibenik	51.553
Zagreb – capital	779.145
Total in Croatia	4.437.460

<sup>\*</sup>Data from the 2001 census

establish a system of palliative care is completely supported by 53.5% of the citizens and health workers questioned; 37.1% of them mostly agreed with the statement that it is necessary to implement a system of palliative care in their town or county (Table 4). The total percentage in agreement with implementation of a palliative care system in Croatian towns and counties amounts to 90.6%. Furthermore, 54.1% of non-health and health workers completely agree that hospices need to be set up in their town, while 33.9% of them mostly agree with

N 0040	Not at all		Mostly not		I don't know, I ca	Mo	stly yes	Completely yes		
N=2348	N	%	N	%	N	%	N	%	N	%
Dubrovnik	3	1.0	4	1.3	32	10.7	89	29.7	172	57.3
Gospić	2	1.0	3	1.5	18	9.0	73	36.5	104	52.0
Osijek	0	0	8	2.7	10	3.3	120	40.0	162	54.0
Rijeka	3	1.2	1	0.4	21	8.4	75	29.9	151	60.2
Split	2	0.7	2	0.7	23	7.7	110	36.7	163	54.3
Šibenik	0	0	0	0	15	7.6	77	39.1	105	53.3
Zagreb	3	0.4	12	1.5	58	7.2	327	40.9	400	50.0
Total	13	0.6	30	1.3	177	7.5	871	37.1	1257	53.5

N=2348	Not at all		Most	ly not	I don't know, I	Mostly yes		Completely yes		
N=2348	N	%	N	%	N	%	N	%	N	%
Dubrovnik	0	0	11	3.7	26	8.7	91	30.3	172	57.3
Gospić	3	1.5	5	2.5	25	12.5	83	41.5	84	42.0
Osijek	0	0	4	1.3	24	8.0	101	33.7	171	57.0
Rijeka	0	0	1	0.4	21	8.4	60	23.9	169	67.3
Split	2	0.7	4	1.3	31	10.3	110	36.7	153	51.0
Šibenik	1	0.5	1	0.5	16	8.1	72	36.5	107	54.3
Zagreb	5	0.6	13	1.6	89	11.1	279	34.9	414	51.7
Ukupno	11	0.5	39	1.7	232	9.9	796	33.9	1270	54.1

that. A total of 88% of the citizens and health workers consider the establishing of hospices in their town or county to be necessary (Table 5). The need for organising a system of palliative care is also supported by the level of citizens' satisfaction in the surveyed towns where 43.3% of citizens think that little attention is given to terminal patients, while 13.4% of them consider that such patients are not given any attention at all. On the other hand, 1.8% of the respondents think that plenty of attention is given to terminal patients in their towns (Table 6). In addition, 35.6% of citizens are of the opinion that Croatian state hospitals take very little care of terminally ill patients. 16.3% of the respondents think that these hospitals take no care at all of terminally ill patients, while 3% of the citizens answered that Croatian state hospitals take the utmost possible care (Table 7).

#### Discussion

Our society is facing probably the biggest changes in the public health service in its history – the increase of the older population. According to the national census from 2001, the total population of the Republic of Croatia was 4.437.460 (Table 1). 15.6% of it was older than 65 years of age. Today, this share amounts to 16.7%. Such a population demographic results from the striving to »prolong« the years of life, but not its quality, through various forms of medical-pharmacological and high-tech approaches to human health. This results in the prolonged duration of chronic diseases. Living and dying from serious chronic disease causes a wide range of physical, psychological and social problems for the individuals affected. Namely, according to the recent demographic data about the aging index in Croatia, a growing emphasis is made on the public health interest in the linkage of the population's increased age with the mortality, morbidity and the structure of the healthcare usage. By this, a significant discrepancy is showed between the particularities of the public health care needs of the elderly population and their satisfaction 12. This gap can be bypassed exactly by establishment of an organised palliative care system. This need emerges in response to the crisis in the public health service and the low quality of health care available to patients in the terminal phase of their lives. At the same time, it is necessary to identify weaknesses in the existing health service in the Republic of Croatia with respect to palliative care and palliative medicine in general.

N=1558	No attention was given at all		Very little attention was given		Moderate attention was given		Much attention was given		Very much attention was given	
	N	%	N	%	N	%	N	%	N	%
Dubrovnik	24	12.0	73	36.5	76	38.0	19	9.5	8	4.0
Gospić	9	6.0	41	27.3	56	37.3	38	25.3	6	4.0
Osijek	30	15.0	89	44.5	62	31.0	18	9.0	1	0.5
Rijeka	37	23.0	85	52.8	39	24.2	0	0	0	0
Split	33	16.5	91	45.5	54	27.0	20	10.0	2	1.0
Šibenik	15	10.2	69	46.9	46	31.3	13	8.8	4	2.7
Zagreb	60	12.0	227	45.4	159	31.8	47	9.4	7	1.4
Total	208	13.4	675	43.3	492	31.6	155	9.9	28	1.8

TABLE 7
CARE IN STATE HOSPITALS OF TERMINAL PATIENTS

N=1563	Almost no care taken		Very little care taken		Moderate care taken		Quite a lot of care taken		Maximum care taken, as much as needed	
	N	%	N	%	N	%	N	%	N	%
Dubrovnik	23	11.5	68	34.0	76	38.0	23	11.5	10	5.0
Gospić	15	10.0	29	19.3	58	38.7	37	24.7	11	7.3
Osijek	29	14.5	73	36.5	72	36.0	24	12.0	2	1.0
Rijeka	50	30.1	62	37.3	34	20.5	16	9.6	4	2.4
Split	44	22.0	84	42.0	51	25.5	20	10.0	1	0.5
Šibenik	20	13.6	52	35.4	45	30.6	22	15.0	8	5.4
Zagreb	73	14.6	189	37.8	163	32.6	64	12.8	11	2.2
Total	254	16.3	557	35.6	499	31.9	206	13.2	47	3.0

Terminal phases of chronic diseases (circulatory diseases and malignant diseases) are the leading causes of death in Croatia and the rest of the world. These health statistics and facts require a special, different kind of care - the care of patients in the terminal phase of their illness. A proven model of care for such patients is palliative care, which represents a part of the rather neglected field of medicine - palliative medicine. In addition, it has been argued that the principles of palliative care should be applied not only to the terminal phase of illness but also to a period much earlier on. This would lead to a broadening of the scope of palliative care to include a large heterogeneous population whose needs vary considerably. Palliative care is today accepted in 120 countries worldwide<sup>13</sup>. In the last 40 years, hospice and palliative care services have grown more rapidly than any other part of health care in many countries. It is estimated that today there are 7350 hospice and palliative care services across the globe, in around 120 different countries<sup>14,15</sup>. Within Europe there are almost 3000 services in 40 countries. Services are most developed in northern, western and southern Europe. Despite this, many of the services fall outside of statutory health care provision and are provided by charitable organisations (such as Caritas or church organisations in Croatia). The range of services varies from country to country, and most countries have a mix of inpatient, home care and increasingly hospital support palliative care services, which are the most common models of palliative care. In Europe, some countries have very well developed network services. For example, in the UK by 2004 there were 216 inpatient hospices with 3096 beds, 332 home care services, 93 extended home care services offering »hospice at home« with additional nursing care, 247 day care units, 249 hospitals with multi-professional (interdisciplinary) palliative care teams, and a further 86 hospitals with specialist palliative care nurses. In France there are 91 palliative care inpatient units and some further 291 hospital-based palliative care teams. Spain has around 206 palliative care teams. Austria has about eight hospice/palliative care inpatient units with a total of 90 beds and a small number of palliative home care teams, some of which are attached to these hospices. Poland has the most developed palliative care in Europe and one of the best in the world. It has around 300 hospice and palliative care services, including inpatients units (110), palliative home care teams (155), as well as 126 outpatient palliative medicine/pain clinics, 9 lymphoedema clinics, 12 day care centres, 7children's home care hospices and several hospital-based support teams<sup>15,16</sup>. Romania has 25 palliative care units and several hospices<sup>17</sup>. Some countries focus more on the direct provision of care to patients and families, while others focus on providing advice, support and education to those doctors, nurses and others who are taking care of patients and families. Croatia is taking its first steps in palliative care organisation (most on the education level).

A rough assessment of the need for palliative care can be determined on the basis of the conducted opinion poll »The need of citizens – non-health and health workers – in the Republic of Croatia for the implementation of a palliative care system and establishment of hospices« following the example of many countries in Europe and around the world that conducted similar but wider surveys (such as a comparison between conventional and palliative care) to determine and confirm the need of their citizens for an organised system of palliative care in their countries, based on the recognition that classical, curative hospitals cannot provide adequate care to terminal patients. One of the best examples, the Study to Understand Prognoses and Preferences for Outcomes and Risk of Treatment (SUPPORT), which included more than 9000 adults hospitalised with serious chronic illness, documented unacceptably high levels of untreated physical symptoms, minimal advance care planning, treatment decisions in conflict with patient's previously stated wishes, and sites of death discordant with patients' expressed preferences<sup>18</sup>. There is also a questionnaire by Addington-Hall et al.: Development of a postal questionnaire to measure satisfaction with services received in the year before death<sup>19</sup>. The England's »End of life research« by Seale et al. studied a subset of relatives (n=3969) of those who died in the National Care of Dying sample<sup>20</sup>, and so did »A comparison of hospice and conventional care«, also by Seale<sup>21</sup>. Questionnaires with similar titles were conducted in Italy<sup>22</sup>, the USA<sup>23</sup>, and the Netherlands<sup>24</sup>, where Sprangers M, Aaronson N conducted research entitled: »The role of health care providers and significant others in evaluating the quality of life of patient with chronic disease«. Some high-quality American research has been conducted by Schwartz CE, Merriman MP, Reed GW and Hammes BJ under the title »Measuring patient treatment preferences in end of life care research: Applications for advance care planning interventions and response shift research«. Many countries worldwide have adopted the universal questionnaire entitled: »The European Organisation for Research and Treatment of Cancer QLQ-C30: A Quality of Life Instrument for Use in International Clinical Trials in Oncology« $^{25}$ , as well as the question naires developed by the Research Steering Committee of the European Association of Palliative Care<sup>26</sup>. There is also a significant number of papers on the assessment of the public's attitude on care at the end of life, such as those of Steinhauser et all on the »Preparing for the End of Life: Preferences of Patients, Families, Physicians, and Other Care Providers «27, or the one from Zapka et all on the »Care at the End of Life«28.

The conducted survey significantly shows that a high percentage of Croatians are dissatisfied with the present level of care for terminal patients (Table 6 ) 43.3% claiming that very little attention is given to this vulnerable group of patients. As much as 13.4% of citizens think that such patients are not given any attention at all, while 11.7% of the respondents expressed their satisfaction by claiming that terminal patients were given much or very much attention. Croatian citizens are of the opinion that Croatian hospitals take very little care of terminal patients (Table 7). There are many reasons for this

attitude. Croatian doctors have insufficient knowledge of caring for terminally ill patients. Education programmes have been realised in various ways (such as congresses, seminars and courses), but there is no practice. Croatia has no institute for palliative care, no hospices and no sub-specialisation in palliative medicine, which are the key prerequisites for quality care of terminal patients. Accordingly, Croatian hospitals have no palliative departments (the so-called acute hospital palliative care service) that would offer the following range of services: 1. the establishment of an open relationship, 2. the setting and achieving of goals, 3. free communication, 4. assistance with patient acceptance of his/her situation, 5. advocacy for the patient and family, 6. flexibility of care delivery, 7. symptom control and 8. assisting the patient to hold onto or regain a sense of identity independent of the illness<sup>29</sup>.

There is a noticeable difference in the attitude towards the care for terminal patients between the inhabitants of Gospić, a town with a rather small population, and the other Croatian towns. People in Gospić are relatively more satisfied both with the care for terminal patients and the attention given to terminal patients in the state hospital. This attitude can be explained by the level of information available in smaller places (through public lectures, media) about terminal patients, and by the awareness about what modern medicine can offer to that group of patients. In addition, it has been proven sociologically that people in smaller places traditionally resist the institutional hospital (care), which can be explained by cultural and traditional values of family life implying that younger generations are obliged to take care of the ill members of older generations in their households - so state hospitals or any other institutions do not need to take on this role.

The awareness that the population is ageing and that there is a need to help severely ill patients, as well as the understanding that Croatian hospitals do not provide adequate care for patients in the terminal phase of illness, has been confirmed by a high percentage of Croatian citizens and health workers (Tables 4 and 5). Now it is essential to accept that this has been a rather neglected public health issue, particularly because palliative care must be a vital, integral part of health services. For this reason, guidelines for the development and functional integration of palliative care must be included in the national health strategies.

As a country on the threshold of entering the EU, Croatia must adopt the Recommendation of the Committee of Ministers of the Council of Europe<sup>9</sup> on palliative care, which states that palliative care is an integral part of the health care system and an inalienable element of a citizen's right to health care, and therefore it is a responsibility of the government to guarantee that palliative care is available to all who need it, not just as a recommendation, but much more as a task and obligation.

# *Limitation of the study*

One of the biggest limitations of the study was the choice of cities. It can be assumed that a different choice of cities with respect to their number of inhabitants, geographical position and traditional and cultural – mainly religious – characteristics, would result in different outcome and attitudes. A study in smaller, rural places would probably reveal attitudes more in favour of a bigger role for the family rather than state hospitals in the care of terminal patients, which opens up several possibilities for further research. Another very important demographic fact is the age of the respondents, because it is sociologically logical that older interviewees certainly pay more attention to how care is provided towards the end of life than younger members of the population.

#### Conclusion

The analysis of the answers obtained from the citizens coming from the non-health field and health workers from the seven Croatian towns that were encompassed by this study regarding the need for establishing a palliative care system as a well-founded and proven model of care for terminal patients, as well as the need for establishing hospices as modern health institutions with a series of systems for providing help to people at the end of life, leads us to conclude that the implementation of palliative care/medicine and the establishment of hospices has been recognised as an indispensable and urgent health need of the citizens and health workers in the Republic of Croatia.

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#### REFERENCES

1.WHO, Health status-mortality, Life expectancy at birth (years), accessed 02.02.2008. Available from: http://www.who.int/whosis/whostat2007\_1 mortality.pdf. — 2. WHO, Definition of Palliative Care, accessed 02.02. 2008. Available from: http://www.who.int/cancer/palliative/definition/en/. — 3. HEALTH EVIDENCE NETWORK, What are the palliative care

needs of older people and how might they be met?, accessed 02.02.2008. Available from: http://www.euro.who.int/HEN/Syntheses/palliative/20040722\_3. — 4. ŠUĆUR Z, Rev soc polit, 1 (2003) 13. — 5. JUŠIĆ A, ĆEPULIĆ E, KOTNIK I, Implementacija palijativne skrbi u postojeći sustav zdravstvene zaštite Republike Hrvatske [In Croat]. In: ŠEGOTA I

(Ed) Bioetika i palijativna medicina (University of Rijeka, School of Medicine, Department of social Science, Rijeka, 2005). — 6. ZALAR Ž, RIMAC M, JURIŠIĆ A, Timski rad u palijativnoj skrbi [In Croat]. In: Palijativna skrb u Hrvatskoj i svijetu. (Croatian Medical Association, Zagreb, 2006). - 7. WHO, Definition of an older or elderly person, accessed 05.10.2008. Available from http://www.who.int/healthinfo/survey/ageingdefnolder/en/ index.htlm. — 8. HRVATSKI ZAVOD ZA JAVNO ZDRAVSTVO, Registar za rak, accessed 02.02. 2008. Available from: http://www.hzjz.hr/rak/ novo.htm. — 9. BRKLJAČIĆ M, Potreba grada Rijeke za hospicijem i palijativnom skrbi. [In Croat] (University of Rijeka, Rijeka, 2007). — 10. Preporuka Rec (2003), 24 povjerenstva ministara Vijeća Europe državama članicama o organizaciji palijativne skrbi [In Croat] (Croatian Medical Association, Croatian Association for Hospice/Palliative care, Zagreb, 2004). — 11. Zdravstvena politika i reforma u Ĥrvatskoj [In Croat], accessed 31. 01. 2008. Available from: http://www.hlk.hr/default.asp?gl=200711130000008 &mode=1&jezik=1. — 12. TOMEK-ROKSANDIĆ S, PERKO G, LIPOV-ŠĆAK M, MIHOK D, PULJAK A, RADAŠEVIĆ H, ČULIG J, Hrvatski časopis za javno zdravstvo, accessed 05.10. 2008. Available from: http://www. hcjz.hr/clanak.php?id=13015&rnd=. — 13. JUŠIĆ A, Liječničke Novine, 48 (2006) 66. — 14. Hospice Information, Hospice and Palliative Care Services: Worldwide Statistics. (Hospice Information, London, 2004). 15. HIGGINSON IJ, J Palliat Med, 8 (2005) 161. — 16. KRAKOWIAK P, Spirituality and religion in hospice care. In: Abstract book (2. Nurse symposium of palliative care, Health care Center of Primorsko-goranska County, Rijeka, 2007). — 17. MOSOIU D, Palijativna skrb u Rumunjskoj [In Croat]. In: Bioetika i palijativna medicina (VI.Bioethics round table, University of Rijeka, School of Medicine, Department of Social Science, Rijeka, 2006). — 18. MORRISON SR, J Palliat Med, 8 (2005) 79. -ADDINGTON-HALL JM, WALKER L, JONES C, KARLSEN S, MCCAR-THY M, JECH J, Soc Sci Med, 52 (1998) 802. — 20. SEALE C, ADDING-TON-HALL JM, McCARTHY M, Soc Sci Med, 45 (1997) 477. — 21. SEALE C, Soc Sci Med, 32 (1991) 147. — 22. COSTANTINI M, HIGGIN-SON IJ, BONI L, ORENGO MA, GARRONE E, HENRIQET F, BRUZZI P, Palliat Med, 17 (2003) 315. — 23. HIGGINSON IJ, GOODWIN D, ED-WARDS AGK, NORMAN CE, J Pain Symptom Manage, 23 (2002) 96. — 24. SPRANGERS M, AARONSON N, J Clin Epidemiol, 45 (1992) 743. 25. THE EUROPEAN ORGANISATION FOR RESEARCH AND TREATMENT OF CANCER QLQ-C30, a Quality- of- life instrument for use in international clinical trials in oncology, accessed 31.1.2008. Available from: http://www.jnci.oxfordjournals.org/cgi/content/abstract/85/5/365? ck=nck. — 26. EUROPEAN ASSOCIATION FOR PALLIATIVE CARE, The EAPC forum on research in palliative care, accessed 02.02. 2008. Available from: http://www.eapcnet.org/about/about.html. — 27. STEIN-HAUSER KE, CHRISTAKIS NA, CLIPP EC, McNEILLY M, GRAMBOW S, PARKER J, TULSKY JA, J Pain Symptom Manage, 22 (2001) 727. 28. ZAPKA GJ, CARTER R, CARTER CL, HENNESSY W, KURENT JE, HARNAIS SD, J Aging Health, 18 (2006) 791. — 29. PHILIP JA, KO-MESAROFF MP, J Palliat Med, 9 (2006) 1339.

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# PORAST STARIJE POPULACIJE DIKTIRA POTREBU ZA ORGANIZIRANIM SUSTAVOM PALIJATIVNE SKRBI I IZGRADNJOM HOSPICIJA

#### SAŽETAK

Cilj istraživanja je utvrditi populacijske potrebe za organizacijom sustava palijativne skrbi i izgradnjom hospicija. U svrhu istraživanja konstruirana je anketa koja ispituje navedene potrebe. Istraživanje je provedeno u 2007. i 2008. godini anketiranjem 1564 građana nezdravstvenog profila i 789 zdravstvenih djelatnika, ukupno 2353 ispitanika u 7 gradova Republike Hrvatske. Znakoviti rezultati dobiveni adekvatnim statističkim metodama potvrđuju potrebu građana i zdravstvenih djelatnika za provedbom sustava palijativne skrbi u 90,6% odnosno izgradnjom hospicija u 88%. Temeljem navedenog zaključuje se da je organizacija sustava palijativne skrbi i izgradnja hospicija prepoznata zdravstvena potreba građana i zdravstvenih djelatnika te je njezina implementacija u zdravstveni sustav Republike Hrvatske neizostavna i neodgodiva.