Geriatric-Palliative Care Units Model for Improvement of Elderly Care

Nada Tomasović
Health Center Dubrovnik, Dubrovnik, Croatia

ABSTRACT

The aim of this research was to indicate the necessity of a new organizational model of health and social care system for the geriatric population in Croatia. Modern geriatrics puts special emphasis on the idea that the care of the elderly should be performed through home care or long-term care institutions, rather than in the acute care hospital departments. The social healthcare of the elderly requires a multidisciplinary approach, as well as teamwork and coordination of institutional and non-institutional departments. Founding of palliative care units is clearly absent from the existing elderly care system. 33% of the total deceased geriatric population within the target area (2000–2002) has passed away in institutions (Dubrovnik General Hospital and nursing homes), what clearly indicates a need for organized palliative care on the stationary level. Nursing homes in Croatia should accept about 4% of the total number of older population (according to the gerontology research). Nevertheless, this research shows that the available capacity of the nursing homes in the Dubrovačko-Neretvanska County is 50% of the projected percentage. The solution might be setting up of palliative-geriatric units in already existing institutions, as shown by the SWOT analysis.

Key words: palliative care, geriatric, model of elderly care

Introduction

Socio-demographic indicators of aging in Croatia clearly show that there are 15.6% of the elderly (age 65 and over) in the entire population. Due to such demographic reality and all its implications, the organization of the health and social care system for the elderly is becoming even more demanding.

History of medicine in ancient Dubrovnik provides a comprehensive overview of how to combine health and social services, especially in regard to the older population. At the beginning of the 14th century, Dubrovnik already had several hospitals, which were used as shelters for the elderly and the poor. Famous Dubrovnik hospital «Domus Christi» was established in 1347. Later, in 1540, it was transformed into a public state hospital, one of the first in Europe. Such a respectable tradition in health care culture requires continuity and integration with all the progressive world trends.

Modern medicine is characterized by an all-encompassing and holistic care for older people. It recognizes their needs, and applies the knowledge from geriatrics and gerontology. The geriatric population is defined by age, but it is not a homogenous group. Geriatrics becomes relevant in a specific life stage when aging induced changes become obvious and start to affect health. Therefore, the notion of a «geriatric patient» will not be strictly confined to age, although it formally refers to persons over 65 years of age.

In many European countries geriatrics is an independent field of medicine or a subspecialty of internal medicine. The Croatian health care system does not foresee organization models that would put sufficient emphasis on geriatrics. However, the number of hospitalized elderly patients and duration of their hospitalization compared to younger age groups clearly shows the need for new organizational solutions within the health care system. The modern trends in the developed world support treatment of the elderly more often in their homes or in long-term care institutions, rather than in acute-care hospitals.

Average hospitalization duration for persons aged over 65, compared to the persons below 65, in the Dubrovnik General Hospital was more than 40% (2000–2002). During the analyzed period, number of
The methods used in the survey were SWOT analysis and descriptive statistics, i.e. average population growth rate in population over 65 years of age for the area of the Dubrovacko-Neretvanska County (1991–2001), the ratio of deceased people over 65 years of age in institutions (nursing homes, Dubrovnik General Hospital) and outside institutions, and percentage of geriatric population situated in nursing homes of Dubrovacko-Neretvanska County (2003).

SWOT is a situation analysis used for defining marketing strategies and business management quality recommendations. In this survey, SWOT analysis was performed by means of a brainstorming procedure by target expert groups. An overview report with the collected data enables comparison between the external opportunities and threats and the internal advantages and weaknesses (in this case creation of geriatric–palliative unit models).16

**Results**

Average population growth rate in population over 65 years of age, for the area of the Dubrovacko-Neretvanska County, in period of 1991–2001 was 2.09% (2.78% male and 1.66% female) (Table 1).

The results showed that out of the total deceased in geriatric population (Dubrovacko-Neretvanska County, 2000–2002), the proportion of those deceased in institutions was 0.33 (Figure 1, Table 2).

According to data, the nursing home capacities in the Dubrovacko-Neretvanska County (2003) enable accommodation of 1.95% of the total geriatric population of that area (Table 3).

**Methods**

Source of the data were nursing homes in the Dubrovacko-Neretvanska County, and Institute for Public Health of the Dubrovacko-Neretvanska County.

The aim of this study was to explain the need and possibilities for introducing the new model of elderly care in Croatia.

The methods used in the survey were SWOT analysis and descriptive statistics, i.e. average population growth rate in population over 65 years of age for the area of the Dubrovacko-Neretvanska County (1991–2001), the ratio of deceased people over 65 years of age in institutions (nursing homes, Dubrovnik General Hospital) and outside institutions, and percentage of geriatric population situated in nursing homes of Dubrovacko-Neretvanska County (2003).

SWOT is a situation analysis used for defining marketing strategies and business management quality recommendations. In this survey, SWOT analysis was performed by means of a brainstorming procedure by target expert groups. An overview report with the collected data enables comparison between the external opportunities and threats and the internal advantages and weaknesses (in this case creation of geriatric–palliative unit models).16
SWOT analysis clearly shows internal advantages (strength) and favorable external opportunities of setting up geriatric-palliative care units in the institutions (Table 4).

**Discussion and Conclusion**

Used data shows an upward trend of population over 65 years of age at the area of the present-day Dubrovnik.

### TABLE 2


<table>
<thead>
<tr>
<th>Period</th>
<th>Deceased geriatric population (1)</th>
<th>Deceased geriatric population in Dubrovnik General Hospital (2)</th>
<th>Deceased geriatric population in nursing homes (3)</th>
<th>Deceased geriatric population in institutions (2+3)</th>
<th>Proportion of geriatric population deceased in institutions (2+3)/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000–2002</td>
<td>2924</td>
<td>665</td>
<td>293</td>
<td>958</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Statistical data source: Institute for Public Health of the Dubrovacko-Neretvanska County and nursing homes in Dubrovnik

### TABLE 3


<table>
<thead>
<tr>
<th>Nursing homes of Dubrovacko-Neretvanska county</th>
<th>Nursing home «Domus Christi»</th>
<th>Nursing home Dubrovnik</th>
<th>Nursing home Vela Luka of Korčula</th>
<th>Percentage of geriatric population in nursing homes Dubrovacko-Neretvanska County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of elderly</td>
<td>94</td>
<td>168</td>
<td>76</td>
<td>43</td>
</tr>
</tbody>
</table>

Statistical data source: Institute for Public Health of the Dubrovacko-Neretvanska County and nursing homes in Dubrovnik

### TABLE 4

SWOT ANALYSIS (STRENGTHS, WEAKNESS, OPPORTUNITIES AND THREATS OF SETTING UP GERIATRIC – PALLIATIVE CARE UNITS IN THE INSTITUTIONS):

**INTERNAL FACTORS ANALYSIS**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Geriatric patients in terminal stages have needs which fall within the domain of palliative care, even when they are placed in institutions,</td>
<td>• There is no widely accepted practice of organized forms of palliative care within the primary level of health care,</td>
</tr>
<tr>
<td>• Setting up of geriatric–palliative units in institutions would decrease the occupation ratio of the ‘acute’ beds in hospitals,</td>
<td>• Insufficient number of educated and equipped personnel for palliative care,</td>
</tr>
<tr>
<td>• A per day placement price in nursing homes is much lower than in hospitals, therefore the placement price in palliative–geriatric units would be much lower than in hospitals,</td>
<td></td>
</tr>
<tr>
<td>• The geriatric–palliative units model represents a headstone for elderly and palliative care development in the field of social-health care,</td>
<td></td>
</tr>
<tr>
<td>• The enforcement of ethical principles and team work are in accordance with western standards,</td>
<td></td>
</tr>
<tr>
<td>• The existing multi-disciplinary teams in nursing homes.</td>
<td></td>
</tr>
</tbody>
</table>

**EXTERNAL FACTORS ANALYSIS**

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduction of health care costs,</td>
<td>• Possible amendments of the Health Protection Act,</td>
</tr>
<tr>
<td>• Legal grounds – palliative care is foreseen as a primary health care measure (geriatric–palliative units would fall, same as nursing homes, within the sphere of the primary health care),</td>
<td>• Inability of health management to promptly recognize the practical implications of palliative care and geriatrics,</td>
</tr>
<tr>
<td>• Recognizing the importance of in-patient geriatric–palliative units being faced with lack of ‘acute’ beds and possibility of placement in nursing homes.</td>
<td>• Possibility of different medical experts refusing to accept organized palliative care.</td>
</tr>
</tbody>
</table>
rvačko-Neretvanska County in the period between 1991 and 2001, and indicates a growing need for adequate care for the elderly (Table 1). The research also indicates the need for incorporation of in-patient geriatric-palliative units in the existing elderly care model (Figure 1, Tables 2 and 3). Organizational changes in the form of geriatric–palliative units are supported by the SWOT analysis (Table 4), as well as by the fact that 33% of the total number of the deceased geriatric population in the target area (2000–2002) has passed away in institutions (Dubrovnik General Hospital and nursing homes). The health care system should be continuously analyzed and judged for quality and efficiency, as well as for its economic features. The outstanding international achievements in health care systems should be applied to our domestic situation only after genuine analyses of specific local environment have been performed. An interdisciplinary approach is needed due to a complex grid of health and social care system forms. The civil society trend towards improving quality of life for elderly people relies on creative and more active, independent and prolific lifestyle without tutor-ship. An aging population has increasingly become a characteristic of the demographic structure of the Republic of Croatia. In 1991, according to the UN criteria, Croatia belonged among the countries with very old population. This demographic information is an argument that clearly supports research projects in gerontology. The aging of the nation should attract interest in planning solutions for the existing and the future geriatric problems. Gerontology research is an extremely complicated issue since it requires a multidisciplinary approach to research into the needs of older people, and planning and evaluating the care for the elderly. Gerontology, legislation and «educating» people, that is, highlighting the problems of the older population and undertaking joint efforts may contribute to the development of a more humane medicine for older people. The modern civil society advocates high-technology medicine, which often fails to achieve desired effect in older population and is frequently replaced by the so-called «personal medicine» capable of facing the problems of living of the elderly.

The cost-effectiveness of the health system depends on fulfilled requirements for comprehensive, coordinat-ed health and social care for the geriatric population. Due to the complexity of the health and social care for the geriatric population, teamwork is inevitable.

According to the determined propositions, which include mobility (physical status), and psychological au-tonomy, the gerontology indicators on the functional dis-ability of geriatric patients are gaining importance. Concept of maximizing the functional independence of older people, as a therapeutic goal, is especially impor-tant.

Due to the nature of diseases and specifics in geriatrics, hospital treatment is not expected to be a promi-nent form of treating, rehabilitation and other care for older people. There is a study to prove that additional social and health care of geriatric patients reduces the unnecessary hospitalization. The research in Split-sko-Dalmatinska County shows that high percentage of hospitalization of geriatric population (if it lasted over 14 days) indicates the need for specific changes in hospital treatment of elderly.

Expectations from the new strategy of health care for the elderly are justifiably focused on the matters of or-ganization. It is necessary to avoid a disintegrated ap-proach and give a leading role in planning and coordina-tion to gerontology centers in close collaboration with the primary health care. In order to create a concept of a high-quality health and social care, it is necessary to re-examine the needs of the older population and adjust level of care to realistic economical potential.

Nursing homes, according to gerontology research, should accept about 4% of the total number of older people. In this context, capacity of nursing homes in the Dubrovčko-Neretvanska County is only 50% of the desirable (Table 3). The demand for available beds in the nursing homes is always higher than the capacities. Therefore, there is an obvious need for a change. Until recently, nursing homes have been dominant social care institutions. However, the results of research conducted in Zagreb show that doctors have more often considered health reasons rather than social reasons as grounds for decisions to admit patients to nursing homes. In the Dubrovnik General Hospital there is no geriatric unit, hence older people are hospitalized at various de-partments, depending on the diagnosis and the patient’s condition. Also, there are no organized hospices to offer palliative care. The performed research clearly indi-cates the importance and the significance of institutions (nursing homes and hospital in Dubrovčko-Neretvanska County in the period 2000–2002) in the geriatric population care during their terminal stage. Independently of the diagnosis, which represents the basis and the beginning of the terminal stage, both the patients and their families are potential palliative care services users. The terminal life stage, each personal drama and ethics require certain degree of contribution from the indi-viduals, society, and profession. The application of palliative medicine in cases of patients in terminal stage of life would represent an adequate assistance for both the patients and their immediate family. Palliative medi-cine integrates doctor’s assistance in: a) reducing symp-toms, b) psychosocial support to the patients and their families, and c) solving ethical problems of the terminal stage of life.

Hospice units are designed to support the palliative care in organizations.

Organizing hospice units enables the palliative care in three basic forms; hospital care, daily care, and home care.

In organizing the patient’s care in the terminal stage of life, the modern hospice becomes an institution gov-erned by the new philosophy in approach to terminal patients. Social or other health-related causes (symptoms which cannot be treated at home) usually represent...
grounds to make decision on admission of patients into hospices. An improvement in health offers a possibility to release the patient to home care, while worsening of the patient’s condition is grounds for re-admittance into the hospice. Palliative medicine is recognizable by its psychological and spiritual aspects of treatment. The need to found hospice units in Croatia is being confirmed on a daily basis. Founding of hospice units would influence the change in attitude, reorganization of health care system and allocation of material resources.

An organizational solution in the field of palliative medicine for geriatric population is seen in the setting up of geriatric–palliative units. Such a model for elderly care, in in-patient form, would result in application of the palliative care principles on the level of primary health care. Specialized geriatric-palliative care units represent a potential for scientific development and education, and a practical solution for coordinating health and social care. Geriatric-palliative care units represent a new possibility for treating geriatric population, when neither a nursing home nor a hospital could offer an adequate solution.

Such units can be organized as separate departments within the existing hospitals, should the space allow it. However, these departments should have features of a nursing home and an option for prolonged treatment and stay.

Geriatric–palliative units can also exist within the nursing homes (preferably in the vicinity of a hospital). The SWOT analysis stresses the possibility of practical use of SO palliative–geriatric units model placement strategies, due to the obvious internal advantages – Strengths and favorable external opportunities (Table 4). The advantage of the presented model is clearly the reduction of occupation of the so-called «acute» hospital beds with the elderly in need of palliative care.

The modern medical and social standards today stress the importance of out-of-hospital services for the geriatric population (home care, social and medical institutions for daily care, services for the elderly, etc.), which represents a recommendation for development of the Croatian elderly care model.

The role of institutionalizing older people must not be neglected in our social and economic conditions; however it must comply with the actual needs and individual requirements.

Geriatric–palliative units are rational and adequate form of institutionalizing and innovate for the existing elderly care system.

REFERENCES


N. Tomasović: Geriatric-Palliative Care Units and Elderly Care, Coll. Antropol. 29 (2005) 1: 277–282

Health Center Dubrovnik, Prijeko 7, 20000 Dubrovnik, Croatia
MODEL GERIJATRIJSKO-PALIJATIVNIH JEDINICA ZA UNAPREĐENJE SKRBI O STARIJOJ POPULACIJI

SAŽETAK

Cilj ovog istraživanja je ukazati da Hrvatskoj treba novi organizacijski model zdravstveno-socijalne skrbi za starije ljude. Smjernice moderne gerijatrije upućuju na češće liječenje starijih ljudi u njihovom domu i ustanovama za produženo liječenje, umjesto na bolničkim odjelima za akutna stanja. Zdravstveno-socijalna skrba o starijim ljudima zahtijeva multidisciplinarni pristup, timski rad, te koordinaciju institucijskih i izvaninstitucijskih službi. Formiranje jedinica palijativne skrbi nedostaje u praksi postojećeg modela skrbi za starije ljudi. Palijativna medicina u zemljama Zapada je afirmirani i primjereni način održavanja optimalne kvalitete života pacijenta sa uznapredovalom bolesti, ograničene prognoze. Od ukupno umrle gerijatrijske populacije u periodu od 2000–2002. u Dubrovačko-neretvanskoj županiji, 33% je umrlo u institucijama (Opća bolnica Dubrovnik i Domovi za stare i nemoćne) što ukazuje na potrebu za organiziranom palijativnom skrbi na nivou stacionara. Domovi za stare i nemoćne bi trebali (prema gerontološkim istraživanjima) zaprimiti oko 4% od ukupnog broja starijih ljudi, a rezultati ovog istraživanja (u 2003.) u Dubrovačko-Neretvanskoj županiji pokazuju da su raspoloživi capaciteta za 50% manji. Rješenje se sagledava u implementaciji palijativno-gerijatrijskih jedinica u već postojeće institucije, što je prikazano SWOT analizom.