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QUALITY OF INSTITUTIONAL ELDERLY CARE IN SLOVENIA

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Academic dissertation to be presented with the assent of the Faculty of Medicine of the University of Oulu for public defence in Auditorium P117 of the Department of Pathology, on 28 August 2009, at 12 noon

OULUN YLIOPISTO, OULU 2009
Habjanic, Ana, Quality of institutional elderly care in Slovenia
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Acta Univ. Oul. D 1021, 2009
Oulu, Finland

Abstract
Elderly people, because of the frail health condition and consequent problems, have in most cases substantial difficulties living at home. Despite the need for widened nursing home custody, the field of quality institutional elderly care in Slovenia in the past did not undergo comprehensive research.

The purpose of this two-part study was to investigate the quality of institutional elderly care and elderly care offered in Slovenian nursing homes. Additional purpose was to evaluate nursing staff members about their willingness, knowledge, skills and importance to meet residents' physical and psychosocial nursing care needs. Also, a part of this research was bound for recognition of maltreatment and nursing staff members’ well-being.

The qualitative and quantitative research methods were used. The quality of institutional elderly care and elderly care offered were researched by interviewing the parties involved in elderly care, residents, relatives and nursing staff members (N=48). The data for quantitative research was collected by surveying nursing staff by using a structured questionnaire (N=148). All data have been collected in three public and one private nursing home located in two major cities of Ljubljana and Maribor. Collected data was examined by content analysis method and statistical analysis, to corroborate findings across data sets, reducing the impact of potential biases that can exist in a single study. Triangulation was used to approach to data analysis to synthesize data from multiple sources.

Main categories of quality institutional elderly were formulated as attentive care, optimal custody and holistic approach. The most important issue of quality institutional elderly care was formulated as meeting needs on time. Nursing staff members were found to be better skilled in meeting physical than psychosocial needs of residents. Maltreatment was recognised as neglect of care due to postponed duties or hastiness in nursing interventions resulting in discomfort of residents. Factors in connection to quality of institutional elderly care were expressed as quality of nursing care, friendly relationship, meaningful activities, pleasant dwelling environment and versatile assistance.

The obtained findings were presented in form of proposals to improve quality of institutional elderly care in Slovenian nursing homes, and could be used to develop institutional elderly care and improve dwelling. In addition many specific terms have been extracted during the analysis process that may contribute to development of gerontological nursing care rationale in Slovenia.

Keywords: institutional elderly care, nursing home, nursing staff, quality, relatives, residents
Acknowledgements

This PhD study was accepted and carried out at the University of Oulu, Faculty of Medicine, Department of Nursing and Health Administration. I would like to express my sincere thanks on behalf of the Faculty of Health Sciences, University of Maribor for giving me this great opportunity to promote nursing science in Slovenia.

My first acknowledgement goes to my former dean and co-supervisor Prof. Dr. Dr. h. c. Dušanka Mičetić Turk, who arranged for my PhD study in Finland, helped me and believed in me from the start. I owe a great debt of thanks to Prof. Dr. Arja Isola, my prime supervisor. During my PhD study and thesis progress she unselfishly helped with her scientific and professional insight as well as personal inclination. I would like to pay my earnest respect in memoriam to Dr. Kaisa Backman, who helped me to form my PhD thesis. I also owe special acknowledgment to my second supervisor Dr. Satu Elo, as she even during her maternity gave me invaluable help with her professional comments and advice. I would also like to thank Prof. Dr. Helvi Kyngäs, who with her professional knowledge encouraged me to finish this work.

My warmest thanks go to both referees, docent Päivi Voutilainen and Prof. Dr. Riitta Suhonen, for their invaluable comments.

I would like to thank my current dean Prof. Dr. Peter Kokol who introduced me to scientific research work and more than a decade believed in me, and that I would eventually accomplish my PhD thesis. My warm thanks go to my sincere friend Tatjana Welzer Družovec for her ongoing support during my PhD study. I would like to thank my colleagues and nursing staff members of four nursing homes for their support in this research. Also, I would like to thank all residents and relatives who participated in the research. My thanks go to my faculty colleagues Majda, Milena, Milica, Mateja, Dubravka, Milica and Helena, who all contributed to my work. For their valuable help in searching scientific papers I would like to thank the librarians Mrs. Nevenka Balun and Mrs. Zdenka Režonja. For helping me with translation to English language and for being always at my disposal I thank Mrs. Ana Milaković and Mr. Miran Jarc. For his understanding, help in translation and support I wish to thank my colleague Dr. Slavko Cvetek.

My special thanks for technical support go to Mr. Alojz Tapajner, who always assisted me when I got into problems. Also, for technical, moral and consulting support I thank my friend Vojko.

Last but not least, with all my heart and soul I thank my family, my sisters Cilika, Slavka and Marica, as well as my nieces Anja, Sonja, Vida and my nephew Davorin for their never-ending support, stimulation and hopes that I would eventually succeed.
Contents

Abstract
Acknowledgements

Contents

1 Introduction 9
  1.1 Background of the research .......................................................... 11
  1.2 Defining the research problems .................................................... 13
  1.3 Purpose of the study ................................................................. 14

2 Contextual framework of elderly care in Slovenia 17
  2.1 Circumstances of living of elderly people in Slovenia .................. 18
  2.2 Nursing homes in Slovenia ....................................................... 19
    2.2.1 Dwelling quality in Slovenian nursing homes ...................... 21
    2.2.2 Institutional elderly care in Slovenian nursing homes .......... 22

3 Theoretical framework 25
  3.1 Literature review ........................................................................ 25
    3.1.1 Quality of institutional elderly care in nursing home .......... 27
    3.1.2 Quality of nursing care ....................................................... 36
  3.2 Synthesis from literature review ................................................ 39

4 Purpose of the study, research questions and study design 47
  4.1 Qualitative part of the research ................................................ 47

5 Methodology 51
  5.1 Methodological aspects of the study .......................................... 51
    5.1.1 Qualitative research ......................................................... 52
    5.1.2 Quantitative research ....................................................... 54
    5.1.3 Triangulation .................................................................... 55
  5.2 Data and methods .................................................................... 58
    5.2.1 Qualitative methods .......................................................... 58
    5.2.2 Quantitative methods ........................................................ 62
  5.3 Ethical considerations ............................................................. 67

6 Results 69
  6.1 Results of qualitative research ................................................... 69
    6.1.1 Quality of institutional elderly care from the residents’ point of view ...................................................... 69
    6.1.2 Institutional elderly care offered from the residents’ point of view .......................................................... 74
6.1.3 Quality of institutional elderly care from the relatives’ point of view ................................................................. 76
6.1.4 Institutional elderly care offered from the relatives’ point of view ................................................................. 81
6.1.5 Quality of institutional elderly care from the nursing staff point of view ................................................................. 85
6.1.6 Institutional elderly care offered from the nursing staff point of view ................................................................. 89
6.2 Results of quantitative research ......................................................................................................................... 92
  6.2.1 Willingness of nursing staff to meet the residents’ needs .......... 92
  6.2.2 Adequacy of nursing staff knowledge and skills to meet the residents’ needs ......................................................... 94
  6.2.3 Staff’s view of the importance of the need to meet residents’ needs ................................................................. 96
  6.2.4 Maltreatment of residents observed by nursing staff .......... 97
  6.2.5 Well-being of nursing staff members involved in institutional elderly care ................................................................. 98
6.3 Summary of the main results ......................................................... 102
7 Discussion ........................................................................................................ 105
  7.1 Reliability and validity of the study ................................................................. 105
  7.1.1 Trustworthiness of the qualitative study ................................................................. 105
  7.1.2 Reliability and validity of the quantitative study ................................................................. 109
  7.2 Institutional elderly care offered in nursing homes ................................................................................. 113
  7.2.1 Recognition of maltreatment ................................................................. 118
  7.2.2 Nursing staff well-being ............................................................................. 119
  7.3 Quality of institutional elderly care from the residents and relatives point of view ................................................................. 119
  7.4 Quality of institutional elderly care from the nursing staff point of view ................................................................. 123
  7.5 Main findings about quality of institutional elderly care ................................................................. 125
  7.6 Future implications for quality of institutional elderly care .................. 126
8 Conclusions ........................................................................................................ 129
References
Appendices
1 Introduction

Slovenian population is growing older similarly to other European developed countries. Reasons for increasing number of elderly people are longer life provoked by changing of cultural, health, social habits and personal development. This means that the traditional pattern of life is changing radically, since today old and young do not live together as one family any more (Ministrstvo za delo, družino in socialne zadeve 2006). Elderly people becoming dependent in activities of daily living increasingly seek social and community help, finally being forced to enter nursing home.

Higher life expectancy is one of the most significant demographic factors of the modern society; in other words, it may lead to ageing population. Projections of Slovene population in the period from 2001 to 2036 (Malačič 2003) show that the population in Slovenia will get old during this period, causing numerous consequences in the field of work, employment, retirement, pension system and intergeneration rates, health and the elderly care (Malačič 2003, Reday-Mulvay 2005). Therefore, these changes must be a stimulation to prepare facilities for solving expected problems connected with ageing. However, at the individual level in the third life period especially quality is expected (Dimovski & Žnidaršič 2007).

In the middle of the year 2005 Slovenia had about two million inhabitants, their average age was 40 years. Elderly people (older than 65 years) represent 14.5% of the whole population in Slovenia. The average age for male was 69 years and for female 77 years and was growing slowly. Inconvenient demographic movements show that in 1990 there were already 15.6% people older than 60 years in Slovenia and for 2010 the ratio 22.1% is expected (Ministrstvo za delo, družino in socialne zadeve 2006). In 2005 Slovenia had 312,874 inhabitants older than 65 or more. 181,609 inhabitants were aged from 65 and 74, 109,256 inhabitants from 75 to 84, and 22,009 inhabitants were 85 years old or more. In all categories women had bigger percentage than men. Maximum difference between males and females was shown at the age of 85 years or more, because in this category women are represented with almost 80% (Statistični letopis 2007). At the end of the year 2007 there were 14,292 available places in 72 nursing homes, 54 of them being public with 12,318 places, 18 private with 1,974 places (Skupnost socialnih zavodov Slovenije 2008). In total 14,292 available places covered 4.6% of whole Slovenian elderly population.
Operations of nursing homes in Slovenia are supervised by the Ministry of Labour, Family and Social Affairs, Ministry of Health, and by the Labour Inspectorate of the Republic of Slovenia, The Health Insurance Institute of Slovenia and the Court of Audit of the Republic of Slovenia (Skupnost socialnih zavodov Slovenije 2008). Also, the education of management teams is usually focused on the social profession while the nursing profession has only a secondary role. As the number of the elderly people searching accommodation in nursing homes is growing and their needs for quality nursing care are increasing, some recent policies implemented in these homes seem to be questionable, for example, the reduction of adequately qualified nursing staff. Lack of qualified nursing staff might answer the question why there are so few relevant studies on this issue (Sigmon & Grady 2001). Management of nursing homes in Slovenia is generally interested to participate in small research projects involving mobility to exchange international experiences, concerning only low financial obligations. It was also my interest, conducting this study, to shift the focus of research on the issue of quality institutional elderly care.

Dwelling in nursing homes is a way of safe life which is, according to the criteria of the United Nations, dedicated to approximately 5% of elderly population over 65 years (Eurofamcare 2006). For example, in Slovenia, at the end of the year 2005, 4.4% inhabitants older than 65 years of age dwelled in nursing homes, which is similar to other countries. Some small percentage (approximately 1–2%) of residents in nursing homes present younger people, in majority accident or stroke victims. The most important aim of nursing home is to satisfy the needs of the elderly, which they are unable to perform temporarily or in most cases for the rest of their life (Zupanc 1994). Nursing homes are described as public or private facilities for long-life care of elderly people being unable to live independently at own home (Hojnik-Zupanc 1999). The elderly people who live in nursing homes should be treated with high quality care. Ramovš (2000) found that while at present time the material goods are provided more than ever, elderly are lonelier and experience old age as aimless and senseless as never.

Quality of institutional elderly care, quality of nursing care and quality of life are phenomena closely related to residents of nursing homes (Holtkamp et al. 2000). Quality of nursing care presents first step to achieve quality institutional elderly care and furthermore good quality of life (Isola et al. 2008). On the other hand, poor nursing care results in poor elderly care and as a consequence in poor quality of life. For fully dependent people quality of institutional elderly care is of major importance to maintain some degree of quality of life. In today’s material
world quality of life is too often measured by one’s wealth. Becoming dependent in activities of daily living, quality of life is all about available support by specialized skills and knowledge of people providing it (Kovner et al. 2002, Futrell & Melillo 2005, Hjaltadóttir & Gústafsdóttir 2007).

The World Health Organization (WHO) defines quality of life as “individuals’ perceptions of their position in life in the context of the culture and value system in which they live and in relation to their goals, standards, and concerns” (World Health Organization 1993). The definition includes six broad domains: physical health, psychological state, levels of independence, social relationship, environmental features, and spiritual concerns. The multidimensional character of quality of life also reflects in assessment of quality of life, which according to King & Hinds (2003) involves physical/role functioning, emotional/psychological functioning, social functioning and somatic/psychological complaints. Not lastly, health related quality of life is the value assigned to duration of life as modified by impairments, functional states, perceptions, and social opportunities as influenced by disease, injury, treatment, or policy (U.S. Department of Health and Human Services 1990).

The strategy of guardianship of the elderly by the year of 2010, adopted by Slovenian government in September 2006 and titled “Solidarity, cohabitation and quality ageing”, demands from the state and experts the development and broadening of new models of support for families with elderly members, new programs of elderly care with individual solutions and others supporting social networks for quality ageing and cohabitation of generations. In institutional elderly care it is necessary to find the balance between families, new social programs for the elderly and their engagement in nursing homes.

1.1 Background of the research

The field of the quality institutional elderly care in Slovenia has not been relevantly researched in the past. A few undergraduate diploma theses and some specialist diploma theses have been produced at the Faculty of Health Sciences and a small number of MSc and PhD theses have been defended at the Faculty of Social Work. Some of them were subject of gerontological nursing care, and the others focused on sociological point of view as regards to the treatment of the elderly (Pahor & Domanjko 2005).
Scientific research about the ageing process and older population started in Slovenia after the year 1994. Unfortunately, most articles focused on general aspects of ageing and were not of specific field (Pahor & Domanjko 2005). A study in 1999 “Assessment of the elderly needs for help”, conducted that 12% of people above 65 years of age cannot take care of themselves, 5% need complete nursing and medical care, and 21% to 25% need help in household and personal hygiene (Kaučič 2000, Hvalič-Touzery 2004a). Additional research of home-dwelling elderly people identified important factors of self-care as handling of everyday tasks, relationship with healthcare staff, medication handling and medical treatment (Železnik 2007).

Quality of institutional elderly care and quality of life are, in general, very broad concepts. The available literature covers topics that are not directly connected to quality institutional elderly care but could have more or less important influence on it, such as the impact of alternative care policies on the quality of family relationships or improving clarification among the relatives and staff in nursing homes. Participation of the relatives in institutional elderly care was also found important in the sense how the relatives could be actively involved in the activities like eating, dressing, washing and similar (Isola et al. 2003).

The quality of nursing care depends on individual’s awareness, experiences, expectations and recognized quality measures (Filej et al. 2003). Defining and measuring the quality of nursing care is not only directed to nursing staff, but also to the organisation of nursing within the facility (Normand et al. 2000). Nursing quality is more than just satisfying nursing (Rantz et al. 2002). Nursing staff should be caring, able to establish personal contact and have a communicational approach. Interventions should reflect professionalism and care for individual problems. It should not be routine work – just an injection and walking away (Pajnikihar 2003).

The quality of institutional elderly care can be assessed by clients, service providers, and/or external auditors. Assessment results may differ significantly and no assessment is adequate on its own because quality as a whole is a broad entity. Assessment by clients is of primary importance and cannot be replaced by evaluations by other parties (Davis 1991, Ovretveit 1998, Voutilainen et al. 2006). There are some specific challenges when the quality of long-term institutional care is being considered. One of these challenges is the difficulty of assessing the actual opinion of the clients, because old people are reluctant to express negative ratings for quality (Voutilainen et al. 2006).
An important part of institutional care from social perspective represents the need to protect frail people and offer them safe place to live (Ramovš 2004). The need to protect was addressed mainly from the health point of view but in some cases it could also refer to maltreatment. Some cases of maltreatments have been investigated, with victims being elderly people and perpetrators their relatives and other parties seeking opportunities of physical and psychical violence, together with material or financial abuse. A part of investigation was also connected to abandoned state of elderly people and sexual abuse (Veber 2004). Maltreatment is usually a repeating process, since victims in 60–70% report that they have been abused for longer time by the same perpetrators (Pentek 2000) and in that manner, early recognition of maltreatments is of significant importance (Razboršek 2002 in Hvalič-Touzery 2004b). The issue of maltreatment in nursing homes is in our society considered with reluctance and is not well researched. Nursing staff members have a difficult task linking quality of nursing care with psychosocial care and due to time shortage being careful to prevent occurrences of maltreatments to residents.

Owing to the researched field of quality institutional elderly care in Slovenia I was trying to find referential sources in Europe and in the world. Most of already done researches were carried out for the population outside the nursing homes. The existing results comprised the researches with elderly people in hospitals and/or at home in combination with the existing social systems and their influence on quality which are changing with regard to time and value (Voutilainen et al. 2002).

1.2 Defining the research problems

The elderly people in Slovenia often live alone at home where their needs are growing together with growing age. They do not have proper care and mostly they have more than one health problem or they need institutional elderly care provision. Elderly people, because of their frail health condition and consequent problems, have in the majority of cases substantial difficulties living at home. Such a situation indicates the need for residence in nursing home. The majority of elderly people do not wish this although they are left alone due to working burdens of family members. Consequently, they move into the nursing home against their will. The majority of elderly people wish to maintain the same home-like quality of life. Some elderly people are disappointed in the nursing home because of insufficient care. It is important that the care provided by professional nursing staff is based on a holistic approach (Nolan et al. 2004). For elderly people in nursing
homes, it is necessary to ensure optimal care, as well as to satisfy their needs and solve their actual and potential problems.

Slovenian institutional elderly care has many unsolved problems or open issues. The first among them are inadequate numerical staff regulations and second, nursing interventions are not followed by the duration of set standards. Also, the set standards for nursing interventions are not in accordance with the available funding. Staff members, taking care of the elderly, have inadequate education regarding gerontological nursing. Also, supervisors of nursing homes do not have specific gerontological knowledge. Clear educational concept about nursing home residence and the possibility of permanent education are important for staff members (Cofone 2000). The reason for this situation is the employment policy of nursing homes, seeking mostly cheaper or inadequately educated staff. Most of the people dwelling in nursing home need humane, individual, holistic and highly professional care. Organizing care for the elderly people’s needs is a dynamic process of coordination of specific organisational structures to make it work successfully and effectively for the elderly with a purpose to reach quality (Filej 2003).

Assessment of quality is a demanding process, where involvement of all parties closely connected to the research phenomenon is needed, to reach the objectiveness of opinions. My assumption was that quality of institutional elderly care in nursing homes should be measured from the point of view of residents, nursing staff members and relatives. In Slovenia, no special criterion for measuring the quality in gerontological care is being used, and also there were no models that could be used to support this study.

1.3 Purpose of the study

The purpose of this study was to research the quality of institutional elderly care and elderly care offered in Slovenian nursing homes. The research was conducted by interviewing the involved parties, residents, relatives and nursing staff members, respectively. The additional purpose of the research was to conduct, by use of a structured questionnaire, nursing staff members’ willingness, knowledge, skills and importance to meet the residents’ physical and psychosocial care needs. Furthermore, nursing staff members were surveyed about recognition of maltreatment to the residents and about their own well-being.

The aim of this study was to ascertain proposals to achieve quality institutional elderly care in Slovenian nursing homes. According to interview
statements of residents and relatives it was possible to verify whether all parties agree about cases of maltreatments and their frequency of occurrences in Slovenian nursing homes. The aim of the study was also to inform about the present state of institutional elderly care in Slovenia, to identify key problems in this regard and to suggest improvements. The obtained results could also contribute to the knowledge in the field of gerontological nursing with a particular focus on the Slovenian context. Dwelling in nursing homes in 21st century should meet some degree of quality of life, to avoid pain and suffering, any kind of maltreatment and neglect and to form pleasant environment, dimensions any human being deserves. Generally, quality institutional elderly care should meet the degree, where individuals would agree to enter the last stage of their life.
2 Contextual framework of elderly care in Slovenia

All European countries, as well as Slovenia, are being confronted with big demographic changes by a rapid increase in the percentage of the elderly in the total population (Zupančič 2004). According to Society of Social Institutions Slovenian nursing homes had 16,600 available places in 2006, and all of them were taken. In 2008, there were additional 17,700 applications on the waiting lists for acceptance to nursing homes (Skupnost socialnih zavodov Slovenije 2008). This indicates that Slovenia should in the next decades double the amount of nursing homes to fulfil the demand, since the situation in years to come will probably get worse. According to statistical data, residents of nursing homes are in 5% independent, in 20% mainly independent and in 75% mainly or fully dependent (Skupnost socialnih zavodov Slovenije 2006).

Nursing homes are responsible for the care for elderly residents and their quality of life (Ramovš 2004). Two tasks should be carried out equally well: one should satisfy all basic physical and material needs of the elderly, and the second one should take care for their interpersonal coexistence as well as other immaterial personal and social needs. The author refers to Fromm (2003), who stated that the primarily important task presents »to have« all the necessary things for survival, such as adequate accommodation, healthy nutrition, warmth, cleanliness, health care and recreation. The second important task, stated by Fromm, is »to be« a human among other people. Implementation of those tasks should enable highly developed human characteristics such as personal solidarity, spontaneity, originality and a kind of personal relationship that is enriched in all human dimensions. According to research by Ramovš (2004), quality of life was experienced only by the residents who entered the nursing home with the an agreement to accept such a way of life.

At present, there are no specific standards for nursing interventions in Slovenian nursing homes, and nursing care is organised primarily according to Slovenian hospital standards. A nursing team consists of a graduate (registered) nurse, nursing assistants and caregivers. Distribution of tasks among nursing assistants and caregivers is approved by The Chamber of Nursing and Midwifery Care of Slovenia (Zbornica zdravstvene in babiške nege Slovenije 2008), but the standards have not yet been implemented entirely because of staff shortage. The role of nursing assistants is to provide nursing care in basic nursing interventions, and the role of caregivers to support the nursing assistants. Due to cost reduction
the role of nursing assistants is often replaced by caregivers. Advanced nursing interventions (medical technical interventions) are provided by registered nurses.

Registered nurses have the key responsibility for nursing care, organisation of work and maintenance of documentation. Beyond this, to achieve good climate between all parties involved in institutional elderly care and to support research activities, artistic as well as scientific knowledge is needed (Pajnkihar 2008). Implementation of nursing care is made by categorisation (approved by the physician on scale from I to III) of the residents according to their ability of self-care and their needs for nursing interventions. Residents’ rights, as stipulated by the European Council, are equal to the social rights and present integrity, and are the highest value in all 41 EU member countries (Zorc & Kranjc 2004).

2.1 Circumstances of living of elderly people in Slovenia

There care of the elderly in Slovenia is facing big challenges. Ensuring and introducing rights for pension and disability insurance represents and will represent an important aspect of guaranteeing an independent life and suitable socioeconomic protection of present and future generations of the elderly. These rights are guaranteed in the system of pension and disability insurance. According to the pension and disability insurance reform from the year 2000 (legally based on the Law of Pension and Disability Insurance), the pension system in Slovenia is mainly based on obligatory pension and disability insurance. It is financed according to the so-called pay-as-you-go method by all employees in public or private sector and farmers.

According to the data obtained by the Statistical Office of the Republic of Slovenia, there are 2,003,584 inhabitants in Slovenia out of which 26.7% are retired. In 2005, the average number of retired persons in the Republic of Slovenia was 531,075 out of which 315,092 were entitled to old age pension, 96,665 to disability pension, 73,254 to family pension, 19,977 to widows and widower pension and 17,178 to state pension. In this case, the average age of insured persons at the beginning of old age retirement was 58 years and 10 months (women 57 years and 1 month, men 60 years and 5 months). By entering into the European Union the age level to get retirement in Slovenia will be increased (Skupnost socialnih zavodov Slovenije 2008).

Most of the population in Slovenia, above 65 years of age depend almost entirely on their pensions. Accordingly to the data obtained from the Institute of Pension and Disability Insurance, in 2004 there were more than 55% such people
whose pension was lower than the minimal salary in the Republic of Slovenia.
These data show that the majority of the elderly live close to poverty, which
influences the medical and social provision of an individual, as well as the older
population as a whole (Ministrstvo za delo, družino in socialne zadeve 2006). All
these elderly people will probably have substantial problems to pay dwelling costs
of nursing homes.

Being member of the EU, Slovenia is obligated to accept or stimulate social
security measures either directly or in cooperation with public or private
organisations to enable elderly people to remain fully authorized members of the
society as long as possible, to live a stimulating life and play an active role in
public, social and cultural environment. It is also necessary to enable access to the
information about services which are attainable to the elderly people, as well as
engagements that can be adjusted to the needs of the elderly and their health
condition (Ministrstvo za delo, družino in socialne zadeve 2006).

Governmental strategy of guardianship of the elderly by the year of 2010
comprises assurance for adequate social and economic sustainable pensions,
introduction of institutional elderly care insurance and assurance of services and
programmes of social security in the field of ageing. Subsequent goals present
improvement of solidarity, cohabitation and quality ageing, conducted by latest
gerontologic research. Solidarity and interpersonal relations among old, middle
and young generation must also improve in order to enable quality ageing and to
take care of fast growing old population in Slovenia (Javornik 2006).

2.2 Nursing homes in Slovenia

Nursing homes offer professional protection for elderly people. Professional
protection comprises all types of aid to the family and/or to the elderly person, by
means of which functions at home and with his/her family are substituted or
fulfilled to the clients, especially with regard to their dwelling, organized nutrition,
security and health protection. The law on social security classifies nursing homes
as a public service, oriented to abolish personal distresses and troubles of the
elderly of more than 65 years of age, as well as to the other persons who, owing to
their age, diseases or some other reasons, are not able to live in their domestic
surroundings (Skupnost socialnih zavodov Slovenije 2008). Numerous studies
have shown that people in Europe are not in favour of nursing home
accommodation and have negative attitude to it (Salvage 1995, Hvalič-Touzery
2007, Zeleznik 2007). On other hand, studies have found that older people do not
want to live with their families to be a burden (Salvage 1995, Hvalič-Touzery 2007). They want to stay in good relationship with family members without being directly dependent on them. Research on users of security alarm system between 1995 and 2001 in Slovenia has found that almost 75% among them would prefer to live in a nursing home in case they could not live on their own. Only 17% of respondents would rather choose to live with one of their children (Nagode 2004, Hvalič-Touzery 2007). This data shows that elderly people’s attitude toward living in the nursing home is somewhat changing.

Acceptance to institutional elderly care in nursing home is arranged by the statute on procedures in asserting the rights to institutional protection. Acceptance or displacement is always used in accordance with the client and their representative. On accommodation or acceptance into the nursing home, the extent, type or suitable category of care services, as well as specialties in carrying out these services are arranged by a special statute. Dwelling costs and social services are paid by residents alone or with the help of their relatives and local communities. Health services are guaranteed from the obligatory social security, which is paid by the Health Insurance Institute of Slovenia (Skupnost socialnih zavodov Slovenije 2008).

Principal activities of nursing homes comprise: residence in a single, double or more-bedded apartment; suitable nutrition according to resident health condition; maintenance of apartments and clothes; personal aid, social security and protection, nursing care and rehabilitation; basic health protection, special counselling activity in nursing homes, carried out by community health or private doctors (Ministrstvo za delo, družino in socialne zadeve 2006).

Slovenian nursing homes are organised on a modular nursing model, where each ward is divided into modules. Each module is made up of a group of permanent nursing staff members and their allocated clients. All Slovenian nursing homes have their own internal standard of staff members’ relocation between wards because of burnout syndrome, different demand for nursing care by wards, symptoms of sympathy and antipathy between staff and residents etc. The time interval for staff relocation is up to 3 years (Skupnost socialnih zavodov Slovenije 2008).

Due to advanced age, elderly people suffer from various progressive health problems, and at some stage become insecure in home environment. Since health problems were seen as main reason to seek accommodation in nursing home, waiting queues have dramatically increased (Leskovic 2004). According to existing circumstances, it is possible to set up private nursing homes on a basis of
concession. Nevertheless, at the time being, the demands have not been fulfilled. Several modern adequately equipped nursing homes are at the moment under construction to take advantage of the new market opportunity, caring for elderly people.

2.2.1 Dwelling quality in Slovenian nursing homes

Most people enter a nursing home for the rest of their life, but in some cases it is also possible to get temporary entrance for the process of rehabilitation after injury or illness. There may be also an option for some seasonal dwelling due to various reasons. The present situation in most Slovenian nursing homes is not very encouraging due to small apartments with inadequate equipment. According to Hojnik-Zupanc (1999), each nursing home represents an organized system of highly regulated environment of daily dwelling that enables maximum room connection (common dining room, lounge for the afternoon resting, recreation gym) and minimum level of privacy and independence.

Based on extensive research on the issue of dwelling in nursing homes, Hojnik-Zupanc (1999) suggests some key parameters to be considered:

*An individual with his/her wishes, life experiences, accommodation ability:* Accommodation is more difficult for those people who are more independent or less adaptable and for those who have a negative attitude towards their age, because their privacy is not guaranteed. On the other hand, accommodation is easier for people with a more open character, who are more optimistic, social, and who are able to get into touch with other people. Generally, women get more easily accustomed to the institutional custody than men.

*Health situation of an individual:* The main reason for the arrival into nursing home is a bad health situation or a disease that requires permanent nursing care. Considerably worrying is the fact that an increasing number of people come to nursing home from the hospital. The best time for moving into residence in the old age is when the person is still in a good physical, health and mental condition.

*Preliminary presentation of the life in nursing home:* It provides information about the nursing home and mitigates negative aspects and stereotypes. Those people who have already visited the residence in nursing home are more easily accommodated. Most of the residents, however, first meet with the residence at their arrival into the nursing home.

*Decision for the accommodation into nursing home:* A common pattern of deciding about moving into a nursing home is that elderly people in reasonable
health condition decide on their own while, on the other hand, already frail elderly people are persuaded by their relatives. Most problems arise if accommodation is unexpected and against the will of the older person, or if the person is not well prepared for it.

*Professional qualification of staff:* For the staff members it is necessary to know the behavioural psychology of the elderly, inter-human relationships, patterns of positive communication and psychology of dying and death. The corresponding level of special education is needed and work with the elderly demands permanent training of the nursing staff (Cofone 2000).

*(Non) consideration of privacy:* The number of beds in rooms also influences the quality of nursing care. Majority of residences are two-bedded or sometimes even four-bedded and the individual’s privacy is thus limited.

*Acclimatization time in nursing home:* The majority of the elderly are getting accustomed after a short time, some of them already after three months.

*Relationship of residents and nursing staff:* The relationship between the staff and the residents is primarily of instrumental nature, based on gratefulness for institutional elderly care provision. The corresponding relationship between the professionalism of elderly care provision and human relations is also important because high professionalism without human warmth can lead into cold, rational relationship depending on the nursing interventions. Two thirds of the nursing staff members »help and stimulate residents to do as much as possible by themselves« (Mlekuž 1996, Hojnik-Zupanc 1999).

*Relationship of residents and relatives:* After accommodation in the nursing home, the elderly person slowly loses contacts with their relatives and friends, which leads to their isolation and solitude. Quality of the relationship also changes, and contacts become more superficial.

### 2.2.2 Institutional elderly care in Slovenian nursing homes

Quality of life in nursing homes can be defined as a degree to which personal identity, independence, free choice and interaction with the others are stimulated (Hojnik-Zupanc 1994). The quality of nursing care should be improved by fewer discrepancies between prescribed standards and the actual implemented nursing interventions (Zaletel 1999). The fulfilment of the residents’ expectations presents a basic criterion of quality elderly institutional care assessment. Research, carried out in three nursing homes, suggested there is a need to make a step forward in residents’ favour with regard to residents’ categorisation (Kavšek & Gomišček
Better educated staff is needed to avoid a number of unpleasant incidents. Shortage of nursing personnel is reflected in the fact that they do not have enough time to provide nursing care and to comply with the required nursing standards. Poorly implemented nursing interventions are a cause of unnecessary complications and hospitalisations of residents.

The quality of nursing care is reflected in improved health condition of the patient/resident, in their increased abilities to function, by their emotional and physical well-being, and in reaching patient/resident satisfaction for provided nursing care (Plank 2005). A holistic approach to nursing care should represent individual treatment, health preservation and rehabilitation, assurance of peace, comfort and dignity at dying (Habjanič & Železnik 2003). Literature suggests that measurement and quality follow up, feedback, professional judgement, self-assessment or accreditation and publication of quality indicators of nursing care leads to advancement of nursing care and thus quality institutional elderly care (Ministrstvo za zdravje 2007).

Quantitative research involving nursing home residents has found that having own residence had a major influence on their safety and well-being, followed by competent nursing staff, friendliness, honesty, tasty food and cleanliness (Križaj & Zaletel 2003). Another research investigated how relatives should get opportunities to contribute their knowledge into the care giving process, especially those who provided home care before institutionalisation. Otherwise, relatives may experience a loss of competence and influence over the old person after institutionalisation. A positive view of the nursing home dwelling was more often found by families who feel accepted and supported (Hojnik-Zupanc 1994).

In a recent research on nursing staff and relative proportion of time spent with residents in nursing homes (Meglič & Černivec 2007), the authors used a method of repeated observations. According to research, the overall ratio was 2 to 1 in favour of direct care (nursing care, help in activities of daily living). Most time (89%) was spent on direct care by caregivers, followed by nursing assistants (78%). Leaders of nursing teams provided only 16% of direct care since they have been responsible for organisation of work and coordination of services. This implies that nurses with highest level of education spend least time with the residents.

A good strategy of quality assurance includes lifelong professional education, evaluation, organisational changes and assurances of financial sources (Kadivec 2004). With the presence of competitiveness in all fields, quality performance is the best assurance of development of every business. This is also the case for the
nursing homes despite the fact that with a few exceptions, they are all public facilities. Therefore, nursing homes need quality management to overcome social and financial challenges (Zorc & Kranjc 2004). Quality will in near future become an important measure of differentiation among nursing homes, and often a motive for the potential residents’ choice of a specific nursing home. In their articles, some authors’ gave a review of the theoretical outcomes on the issues about quality as provided by foreign experts by adding the Slovene specific concerns (Zaletel 1999, Filej 2007).

Past research on nursing homes in Slovenia was widely oriented to elderly perceptions about accommodation and strategies how accommodation should be approached. Quality was mainly addressed as quality assurance, from the organisational viewpoint. Nursing home residents have only been involved in few quantitative studies about general aspects of institutional elderly care. Despite the limited number of conducted research, institutional elderly care was seen as recommendation for holistic and individualised care of elderly people’s needs, in the sense of quality of life, well-being and respect of clients’ personal dignity. Conducted research in Slovenia has not yet been subject to qualitative analysis methods using a triangulation method. I therefore decided to concentrate the main part of my study on obtaining findings about quality institutional elderly care and elderly care offered in Slovenian nursing homes by using qualitative approach and triangulation. In order to obtain relevant data, three different points of view have been included: residents, relatives and nursing staff, respectively.
3 Theoretical framework

Two main concepts of this study, that is, quality of institutional elderly care and quality of nursing care were subjects of comprehensive literature research. Chapter 3 starts with numerical literature search from electronic reference databases, according to eight search terms linked to main study concepts. In following chapters, all main concepts are separately reviewed, definitions and descriptions are provided from recognised international journals. The chapter ends with a synthesis of reviewed literature, a description of main concepts and how they were used in the study.

3.1 Literature review

The aim of the literature review was to assess findings about quality of institutional elderly care in nursing homes and quality of nursing care. Additionally, quality of institutional elderly care was in greater detail reviewed by residents, relatives and nursing staffs’ points of view. Quality of nursing care was in greater detail reviewed by nursing homes, recognition of maltreatment or abuse and nursing staff well-being.

Search strategy. Literature was searched in the following electronic reference databases: CINAHL (Cumulative Index to Nursing and Allied Health Literature), ProQuest, Science Direct and MEDLINE. The literature review started in 2004 when a 10-year time frame from 1993 to 2003 was determined (Paniagua 2002). To obtain recent findings, literature review continued into 2009. All papers published from 1993 were considered in the electronic database search. The following search terms were used: quality of institutional elderly care in nursing home, institutional elderly care and residents, institutional elderly care and relatives, institutional elderly care and nursing staff, quality of nursing care, quality of nursing care in nursing home, maltreatment in nursing home and nursing home staff well-being. A more detailed search about quality institutional elderly care by resident, relative and nursing staff was done without the term “quality”, since only low frequencies of papers were retrieved. Some words were also substituted by similar words: “institutional” by “long-term”, “relatives” by “family” and “staff” by “personnel”, and added to retrieved papers. A brief procedure of electronic database search is presented in table 1.
Table 1. Procedure of electronic database search for literature review.

<table>
<thead>
<tr>
<th>Electronic database</th>
<th>Term</th>
<th>Number of hits</th>
<th>Retrieved papers after inclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINAHL, ProQuest,</td>
<td>quality of institutional elderly care in nursing home,</td>
<td>264</td>
<td>45</td>
</tr>
<tr>
<td>Science Direct,</td>
<td>institutional elderly care and residents,</td>
<td>6005</td>
<td>30</td>
</tr>
<tr>
<td>MEDLINE.</td>
<td>institutional elderly care and relatives,</td>
<td>636</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>institutional elderly care and nursing staff,</td>
<td>927</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>quality of nursing care,</td>
<td>3068</td>
<td>not conducted</td>
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<tr>
<td></td>
<td>quality of nursing care in nursing home,</td>
<td>582</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>maltreatment in nursing home,</td>
<td>231</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>nursing home staff well-being.</td>
<td>25</td>
<td>6</td>
</tr>
</tbody>
</table>

* Since 47 specific papers about nursing care quality in nursing home were retrieved no further attempt was made to conduct inclusion criteria for general quality nursing care literature.

**Inclusion criteria.** Literature was included using following criteria:

1. The search term included in paper title, abstract or keywords.
2. Content of the abstract potentially relevant to the main concepts of this study, not related to dementia, cognitive impairment or research of only one specific illness.
3. Main text describing quality, quality indicators or quality of life using qualitative or quantitative research methods.

Separately for literature about recognition of maltreatment and nursing staff well being inclusion criteria were (1) the search term included in paper title, abstract or keywords and (2) abstract of the paper providing some research results or statistical data.

**Search Outcome.** The first step of the literature search resulted in 264 hits for quality of institutional elderly care in nursing home (table 1). According to inclusion criteria 45 papers were considered in this study. Although plenty of papers were retrieved regarding individual views of institutional elderly care, after searching main text by quality, quality indicators or quality of life, only 30 papers about residents’ view, 6 about relatives view and 28 about nursing staff view were considered. The first step of the literature search revealed 582 hits of quality nursing care in nursing homes where only 47 were considered and others were excluded since the term quality was not directly linked to nursing care in nursing home. Finally, 12 papers out of 231 revealed were considered for recognition of maltreatments in nursing home and 6 papers out of 25 revealed were considered.
Overall 171 papers were retrieved by literature review and were linked to the study’s main concepts of the institutional elderly care phenomenon.

The majority of literature was obtained from different internationally recognised journals such as Journal of Advanced Nursing, Journal of Gerontological Nursing, The Gerontologist, Journal of Clinical Nursing, International Journal of Nursing Studies, Scandinavian Journal of Caring Sciences, Nursing Ethics, Quality of Life Research, and Journal of Gerontology. Research papers from the above journals were selected according to international recognition of the journal, citations and topics similar to my study, thus allowing direct comparisons of obtained results.

3.1.1 Quality of institutional elderly care in nursing home

Admission to nursing home usually puts the elderly under stressful situation. The initial reaction to moving to a nursing home is marked by emotional responses and is not dependent on whether the admission was planned or unplanned (Brandburg 2007). New nursing home residents may experience a sense of homelessness during the transition or adjustment period (Heliker & Scholler-Jaquish 2006). When elderly people move to the nursing home, many of them are surprised by the condition of the other residents which results in additional psychological impact. Relationships of elderly people, as well as their social status are bound to change when they move to a nursing home (Guse & Masesar 1999, Tseng & Wang 2001). If any changes in the environment occur or any psychological variables change, the subjective perception of quality of life may be disturbed (Cummins et al. 2003).

Little consensus exists on what quality institutional elderly care is and, while most authors agree that it is an important concept, it remains, on the whole, nebulous, diverse and lacking in specificity (Murphy 2007). Redfern and Norman (1999) identified the promotion of resident autonomy, good leadership, attitudes and sensitivity and a philosophy of individualized care as indicators of quality institutional elderly care, while Luker et al. (2000) and Clarke et al. (2003) identified knowing the resident as important. Quality institutional care should be resident-focused, treating the whole person with respect and dignity (Carroll, 2005). Attree (1996) and Rantz et al. (2001) identified the importance of structural elements such as organization of nursing care, facilities, skill mix and staffing levels. Murphy (2007) exposed attributes that were related to making the environment
home-like and attributes which focused on helping residents maintain an interest in life, like meaningful and social activities and teaching.

Both nursing home staff and the broad public continue to be concerned about the quality of institutional care in nursing homes (Dyck et al. 2005). Nevertheless, at present time, only few developed countries implemented some instruments to measure quality of institutional elderly care. In US, for example, nursing homes are required to use the research-based Resident Assessment Instrument (RAI) for assessment and care planning purposes (Morris et al. 2000). Quality indicators have been developed based on the RAI assessment data. Supervisory organisation collects the quality indicators data through the implemented information system. Another approach, a user-based quality, implies that quality gives satisfaction to a customer and that quality is measurable in the sense of asking a customer about the service experience (Gummesson 1992). The users’ answers can be used as input for quality development. The user-based view on quality measurement is traditionally included in service organisational research (Seth et al. 2005) and also increasingly in medical and nursing research (Axelsson 2000). In fact many health organisations reported using client satisfaction as a tool to evaluate quality of elderly care (Hasson 2006).

Elderly care organisations should have a system for establishing quality goals, as well as for planning, performing, evaluating, and developing quality (Hasson 2006). The goal of the quality system is to ensure that the individual’s care and service needs are met, and the system should include methods to secure aspects such as needs-assessment procedures, responsibilities of staff members and organisations, adequate staff competence, as well as reports of adverse events and complaints (Hasson 2006). A main objective of nursing homes is to make the residents’ lives as good as possible in spite of their health problems, reduced level of functioning and extensive dependency (Bergland & Kirkevold 2006).

**Institutional elderly care from the residents point of view**

Care of elderly people is becoming a national priority (Fahey et al. 2003, Isola et al. 2008) and the quality of care delivered to residents is coming under increasing scrutiny through the use of explicit measure or “quality indicators” which seek to judge the process of care according to specific standards (Marshall et al. 2001). According to the international state-level geriatric policy guidelines, all residents in nursing home should be guaranteed high–standard care of good quality (Vaarama et al. 2001, Voutilainen et al. 2002, Westin & Danielson 2007).
International acts or legislature state that the overall objective for health and medical care is good health and care for the whole population on equal terms (Western Health Board 2000, Department of Health 2001, Ministry of Health and Social Affairs 2006). Older people must be acknowledged as integral members of society and must have the right to enjoy a good quality of life and full equity in access to the services necessary for optimal health. The positive contribution of older persons to development, and as a resource for their families, communities and society, must be recognized (World Health Organization 2004).

Nursing home residents defined quality of institutional care as having nurses who were concerned about them and demonstrated caring behaviors, were competent and skilled, communicated effectively with them, and taught them about their care (Oermann 1999, Gunther & Alligood 2002). In addition residents expressed their expectations for close relationship with staff members in a manner that their needs were better understood and time for conversation was available (McGilton & Boscart 2007). Much of the literature acknowledges that persons moving into a long-term care facility experience a major life change which highlights the physical and psychosocial problems during this process (Reed & Morgan 1999, Huppert et al. 2000). To better cope with emerged situation residents expect home-like environment, to be treated with respected and remain autonomous or at least have some feelings of autonomy (Rantz et al. 1999, Hwang et al. 2006, Westin & Danielson 2007, Teeri et al. 2008).

Although there was little consensus on what constitutes a good quality of life in nursing home, some aspects relate to the residents’ physical, mental and social abilities, others to factors that can be influenced by knowledgeable nursing staff by creating amiable surroundings (Hjaltadóttir & Gústafsdóttir 2007). Residents found important to feel secure, enjoy privacy and homeliness, if possible in a single-bedded residence. Furthermore, it mattered to be recognized as an individual with his or her roots in their own respective family and doing meaningful activities (Guse & Masesar 1999, Kane et al. 2003, Hjaltadóttir & Gústafsdóttir 2007). Residents should try to continue with activities they have preferred prior to admission (Ljubic 2003).

Regarding quality of institutional care from residents’ perspective it is also important to consider their health and emotional condition (Bowers et al. 2001b). For independent residents quality of institutional elderly care might be closely related to close, personal and friendship-like relationships with nursing staff members, while severely dependent residents, on the other hand, might focus primarily on the nursing care contributing to their physical comfort, subsuming
good relationships with staff members as one aspect of this care. Antonucci (2001) found that residents can also experience thriving, if they have important emotional relationships elsewhere, and are not dependent on the nursing staff in this respect.

Physical functioning and mobility, as well as feeling healthy were important in relation to residents’ quality of life (Guse & Masesar 1999, Kane et al. 2003), and to have freedom of choice and autonomy (Boyle 2004). Ball et al. (2000) described a clear primacy of five domains for most residents: emotional well-being, independence and autonomy, social relationships and interactions, meaningful activities, and care provided by the facility. Independence and autonomy refer to ability of residents to take care of their own needs and maintain functional ability and self-esteem. Studies indicated that limited physical and mental ability, loss of home and belongings, diminished contact with relatives and friends, rigidity of facilities and powerlessness in decision-making in one’s own affairs characterize changing circumstances of the elderly, living in nursing home (Hjaltadóttir & Güstafsdóttir 2007).

Similar to Bowers et al. (2001b) Kirkevold & Engedal (2006), regarding institutional care, conducted that residents rated high primarily elements of nursing care, such as personal hygiene and having enough time for meals, together with permission to get visit at any time. Other aspects, such as information received from staff, opportunities to participate in care provision, having the opportunity to go out for a walk or taking part in leisure activities, were rated lower. Last but not least technical improvements also were found as improvement to the quality of life of the residents. Audiovisual stimulation and using storytelling in groups of residents was found to increase their quality of life (Ronnberg 1998). The benefits of computer and internet connection were useful to residents due to direct communication with family members, provision of mental exercise, education and enjoyment (Tak et al. 2007).

**Institutional elderly care from the relatives’ point of view**

Family members of institutional elderly care recipients are playing increasingly important roles in care provision, since many of the elderly receive services and care both from the municipalities and from their relatives (Hasson 2006). They can act as interpreters of elderly, since some nursing home residents suffer from behavioural problems, like confusion and dementia, and it is therefore difficult to interview them reliably. Family members can identify the elderly client’s
individual needs and define his/her well-being and hence serve as contact persons between the client and the nursing staff (Isola et al. 2003).

Families are involved in institutional elderly care in a multitude of ways including: visits, hand-on care, planning and decision making, family events in councils, monitoring of care quality and resident well-being and communicating residents’ needs and desires to nursing staff. The complexity of family involvement was reflected in the varied approaches taken by researches measuring involvement (Port et al. 2003). Equally important are the ways in which family become involved in care (e.g., emotional support, assistance in activities of daily living), the quality of interaction with resident and staff, and the extent to which family may improve the resident care and/or quality of life (Rowles & High 1996).

Studies have shown that family members’ assessments of quality are more positive than client assessments. Quality assessments are subjective and it is not certain that the family members’ assessment generally correlates with the assessment of the client (Gasquet et al. 2003, Voutilainen et al. 2006). Family members can be a source of information regarding the quality of care, especially if they have been very interactive in the care processes (Ejaz et al. 2003). Relatives’ views on quality of institutional elderly care can be an alternative source of information when residents have difficulties expressing their needs (Ejaz et al. 2003, Lubart et al. 2004a). The opportunities and encouragement given to clients and their families to be involved in caring activities, as well as in the planning and decision making concerning the clients life in nursing home, are essential elements of quality institutional elderly care from the client perspective (Rantz et al. 1999, Isola et al. 2003). The role of family members is especially important in care of elderly with dementia, because the nurses are unable to understand the elderly client’s situation without knowledge of his or her life story, habits and customs. Family members are able to tell about the elderly person’s life and hopes for better treatment (Isola et al. 2003).

Earlier research on family members’ perceptions of quality institutional elderly care in nursing homes resulted in relatives being highly satisfied with care provided by staff members and those family members who were satisfied with the care delivered to the clients also gave high rating for the quality (Lubart et al. 2004b, Voutilainen et al. 2006). However, relatives had also reported dissatisfaction with specific aspects of care, such as their own possibilities to participate in care provision, information they received from staff members regarding residents’ illnesses and treatments, ignorance of residents’ personal preferences when planning care and services and also they were quite critical
about interaction and social support (Curry & Stark 2000, Isola et al. 2003). According to Laitinen (1996), family members were also critical about psychic and spiritual needs.

Relatives’ perceptions of quality may also be a complement to residents’ perceptions, since the views of these groups have been shown to differ from each other (Ejaz et al. 2003). It was also recognized that family members are likely to influence or make decisions for residents, which further points to the importance of family perspectives (Ejaz et al. 2003). However, like residents, the family members may also be unwilling to report dissatisfaction because of fear of staff retaliation against their relative (Hertzberg & Ekman 1996). Likewise to residents, relatives felt that residents do not necessarily always get the help they need (Duffy et al. 2001, Taverner 2002, Christensson et al. 2003, Voutilainen et al. 2004).

Furthermore, relatives have been reported to give a large amount of informal care to their elderly residents (Hasson 2006). Quality assessment by family members in institutional elderly care settings may have some limitations (Zanetti et al. 1999). The judgment made by family members may be influenced by factors not directly related to the care delivered, such as their general opinion of nursing home, duration of the client’s dwelling, emotional reactions to the admission of the client to nursing home and the frequency of visits to the client (Buckwalter et al. 1997).

Visiting the elderly person, keeping company, reading and taking them out were considered as most important tasks by family members (Laitinen 1996, Ryan & Scullion 2000). Families were usually content with their own role as providers of social and emotional care. Therefore, the emotional and cognitive support, encouragement, and guidance given by nurses to family members was the most important factor that facilitated family members’ participation in care (Laitinen 1996, Marquis et al. 2004). The family members may feel that it is their responsibility to provide psychosocial and emotional support and to monitor the quality of care (Hasson 2006). As Voutilainen et al. (2006) found, family members were interested to participate in the care of the clients. The process of integrating families in institutional elderly care is challenging because it may be contrary to the families’ expectations and wishes; families may feel that they are being forced to modify their care-giving modes, adopt new ones, and integrate them with the care-giving modes of the nursing staff. Roles of family members and nursing staff must be carefully considered and clearly defined. Issues arise from facility policies and staff attitudes toward family involvement, but role of family members may become either overestimated by the family or underestimated by the staff.
Attitudes, together with the abilities of the nursing staff to form cooperative relationships with family members, influence both the quality of life of the clients and the quality of nursing care. Nursing staff must be sensitive to the different needs related to involvement to improve the quality of nursing care (Voutilainen et al. 2006).

According to the study of Voutilainen et al. (2006) there is a need for improvement to allow and encourage greater involvement of family members. Involvement must be based on the assessment of individual needs and the desires of the client. Voutilainen et al. (2006) suggested that a closer look at demographic factors is important to support the family members individually and thus improve the quality of institutional elderly care.

**Institutional elderly care from the nursing staff point of view**

The role of staff members in nursing homes is bound to grow in amount of nursing interventions due to demanding older population, with many diseases and chronic illnesses. In addition to that nursing staff should possess communication and psychology knowledge, with growing demand for juristic knowledge due to arisen need to consider social and culture environment of residents (National Citizens’ Coalition for Nursing Home Reform 2006). In previous studies nursing staff considered their capacity to help residents’ excellent (Isola et al. 2008). On other hand nursing staff reported average knowledge about residents’ status, history and personal identity (Kane 2001). Several nursing staff categories are engaged in elderly care. In many municipalities practical nurses and nurse aides comprise the largest professional groups (Fahlstrom & Kamwendo 2003). There are a high percentage of women working in elderly care, and a low percentage (less than 10%) of men (Hasson 2006).

Staffing, the educational level of the staff and management skills have been used to explain variation in quality of care (Bostick 2004, Schnelle et al. 2004). A necessary basis for delivering institutional elderly care of good quality were job satisfaction as well as client satisfaction and safety in association with the quality of nursing care and improved working conditions (Petterson et al. 2006). Some general features that may affect the level of satisfaction with quality were: age, gender and educational level. In addition to these general variables, there was research evidence indicating that participating in care is an important indicator of quality and that it affects quality ratings as well as overall satisfaction (Voutilainen et al. 2006). Some recent empirical studies found that greater resident satisfaction
was associated with higher staff job satisfaction (Redfern et al. 2002, Sikorska-Simmons 2006). Similarly, Wiener (2003) proposed that interventions to strengthen staff care provision in terms of improving the work conditions and increasing staff competence are possible ways to improve quality of institutional elderly care.

Already the greatest challenge in institutional elderly care presents the problem of ensuring sufficient and competent staff (Hasson 2006, Robinson & Cubit 2007). Due to negative images and stereotypes associated with older people and elderly care, the job seems to have lost its attraction, and a constant need to recruit large numbers of nursing staff for elderly care has been reported. According to Robinson & Cubit (2007) it is well documented that institutional elderly care was perceived as the clinical practice option least attractive to nurses and that both colleagues in other disciplines and nursing students have ageist attitudes (Hasson 2006). Nursing staff need to have a positive attitude toward elderly people to provide quality care. Yet, the literature reveals that nursing student attitudes toward work with older adults tend to be negative (Cozort 2008).

Institutional elderly care providers should be aware of the possibility that staff education does not automatically improve quality of care or satisfaction among residents or their relatives (Testad et al. 2005). A structured educational program in nursing homes could lead to improved quality of institutional elderly care by means of reduced use of restraints (Saarnio et al. 2008) and improved organisation of work (Nelson et al. 2006). To improve quality of institutional elderly care interventions to strengthen staff care provision in terms of improving the working conditions and increasing staff competence were proposed (Wiener 2003).

Bravo et al. (1999) found no association between the proportion of nurses and quality of care, but found that wards led by management with nursing training provided a higher quality of care than wards led by managers without nursing training. Nursing staff members sometimes had difficulties to change their working behaviour after gaining new knowledge, in a manner to be appreciated by residents and their relatives. Prior studies have found that staff had difficulties putting knowledge gained in educational interventions into practice (Broad 1997).

Performing advocacy implies nurses to judge residents needs for support, when their own ability to represent themselves wavers (Randers & Mattiasson 2004). When residents cannot represent themselves, it is important that nurses reduce strain by behaving correctly (Randers & Mattiasson 2004). Elderly people often experience nursing staff as overprotective and they may become more
dependent on them. They often complain about being treated as children or being patronized (Woolhead et al. 2004).

Communication by means of conversation or company presents a very important aspect of quality institutional elderly care where various researches suggested some ideas for improvement. For example, humour may function as a strain reducer for older people in some situations by making the event less dramatic and more confident (Walsh & Kowanko 2002). Additionally sensitive listening should support the entire communication between residents and nursing staff, the way they talk and the subject they talk about (Caris-Verhallen et al. 1999, Walsh & Kowanko 2002, Randers & Mattiasson 2004). According to Anderberg et al. (2007) elderly people dislike to talk about daily life, needs and limitations, future thoughts and about death.

Support from nursing staff had a positive effect on the residents’ quality of life (Bowers et al. 2000, Tseng & Wang 2001). This was in accordance with the research conducted by Hjaltadóttir & Güstafsdóttir (2007) where the residents emphasized the need of having a good relationship with the nursing staff, as they were so dependent on their help. Nursing staff can develop means to enhance such cooperation, provided they recognize the family’s contribution to the residents’ well-being (Weman et al. 2004). Moreover, many residents are being unable to communicate to others, express needs or satisfaction. This makes it especially important for nursing staff and relatives to know what constitutes quality of life in this population and how it can be maintained or increased (Gerritsen et al. 2004).

Nursing staff members should pay attention to show respect for older people as respect implies only small bit that makes an elderly feel valued (Jacelon et al. 2004). Older people link dignity and respect (Gallhanger & Seedhouse 2002, Woolhead et al. 2004). Losing bodily functions threatens dignity (Nordenfelt 2003) and it is important not to expose the elderly in front of others (Gallhanger & Seedhouse 2002, Woolhead et al. 2004). Also, it is important that nursing staff pays respect to older people’s choices, such as choosing what clothes to wear (Woolhead et al. 2004).

Nursing home staff well-being. The working conditions of the nursing staff have been seen as an especially important factor influencing the quality of care (Robertson et al. 1995, Hannan et al. 2001). Some researches report that low staffing levels and low job satisfaction may put residents at greater risk for health problems (Bowers et al. 2000, Schnelle et al. 2004, Castle & Engberg 2005). As the need for a qualified and stable institutional workforce continues to grow, recommendations are being addressed to improve care-related stressors, promote
positive communication techniques between nursing and leading staff, reduce paperwork inefficiencies, and reduce staff shortages (Cherry et al. 2007).

Multiple health care and societal issues are converging to create serious staffing challenges for nurse leaders in the institutional elderly care industry. These include low job satisfaction, high staff turnover, a shrinking pool of nurses and nurse aides from which to draw, and a growing elderly population requiring increasingly higher levels of care to manage multiple chronic conditions (Kovner et al. 2000, Castle & Engberg 2005, van den Berg et al. 2006, Hayes et al. 2006). Additional stressor to endanger the well-being presents the fact that nursing is a high risk occupation, and performance of patient handling tasks contributes significantly to this occupational risk (Nelson et al. 2006).

Nursing home staff members reported suffering from both physical and mental fatigue. Isola et al. 2008 conducted that feeling of physical fatigue once a week or more often was reported by nearly half of the respondents and mental fatigue once a week or more often was felt by nearly one-fifth of the respondents. Two-thirds of the respondents were quite satisfied with their current workplace, but more than one-third of them would have preferred a different job. Ongoing workforce instability in many countries is raising questions about the impact of turnover on the well-being of nursing staff, quality of care and systems costs (Hayes et al. 2006).

3.1.2 Quality of nursing care

Quality of nursing care is a multidimensional concept encompassing factors such as philosophy, individualized care, documentation, leadership style and ward atmosphere (Leino-Kilpi 1990, Smith 1991, Caspar & O’Rourke 2008). Defining and measuring the quality of nursing care is not only about individual practitioners but also about how nursing care is organized within healthcare institutions (Schnelle et al. 2004). For achieving quality it is often necessary to oscillate between the two opposing »poles« of quality: between achieving variability and adaptability and meeting nursing standards and norms (Normand et al. 2000).

Quality of nursing care should comprise safety, professional nursing interventions, skilled communication and recognition of pain, dimensions that present important fields of nursing knowledge (Gunther & Alligood, 2002). Nursing staff members have an essential role in improving the safety of patients and preventing medical errors (Mitchell 2002, Hughes 2004). In addition to meet quality needs nursing interventions should be compatible with patients’ expectations (Irurita &
Williams 2001). On the other hand, if communication skills of nursing staff are poor the residents might think that staff members do not care about them (Lynn et al. 2007). Furthermore, improper responses by staff may cause residents to believe they are no longer important or their concerns or feelings are unimportant (Winchester 2003). Improvement of communication skills may lead to positive effects of elderly nursing care (McGrath et al. 1999, Carroll 2005). Adequate pain recognition is important quality indicator since up to 80% of the institutionalized elderly report at least one pain problem (Barkin et al. 2005). Pain can impair mobility, result in depression, and diminish quality of life (Stein 2001, Ferrell 2005).

As the largest body of healthcare professionals, nurses make an important contribution to the quality of patient care (Cooper & Benjamin 2004). The monitoring of the quality of nursing care harks back to the era of Florence Nightingale, who measured the rates of morbidity and mortality (Nightingale 1859). However, it was not until the 1980s that specific tools for monitoring quality in nursing care were developed, the most commonly used being the “Monitor” system and the Quality of Patient Care Scale (QUALPACS), which both use preformulated standards, and the Dynamic Standard Setting System (DYSSSY), which uses standards and criteria defined by practitioners (Harvey & Kitson 1996). Although these tools are still in use, they require skilled facilitators to implement them, which can make their use too time consuming.

The importance of quality nursing care is unquestioned – it presents the right of all patients and the responsibility of all nurses (Donabedian 1988, Jennings 1993). Health care environments throughout the world are currently under enormous pressure to improve quality of nursing care, while at the same time restraining the increasing costs (Tzeng & Yin 2008). Nowadays providing quality care and satisfying customers requires elevated financial resources.

Quality of nursing care in nursing home. Good quality of nursing care should result in a good quality of life for the residents, which means that their physical, psychological and social needs were fulfilled. Previous findings indicate that nursing staff members were more convenient to recognize residents’ physical needs (Isola et al. 2003, Voutilainen et al. 2004, Isola et al. 2008). To be able to cater for their social needs, residents should have opportunities to discuss and exchange ideas with the nursing staff and thereby obtain personal psychological support (Backman & Hentinen 2001, Voutilainen et al. 2004). The psychological needs especially relevant to quality of nursing care were ascertained as autonomy, individuality, dignity and privacy (Burtgraf & Barry 1998, Leino-Kilpi et al. 2000). McCormack (2003) and Davies et al. (2000) suggested that care for older
people should be person-centred and holistic, based on autonomy, respect, choice and the promotion of independence.

In addition, quality of nursing care in nursing homes was conceptualized as freedom from deficiencies and was measured in outcome variables, such as the number of pressure ulcers, death rates, nutrition status, dehydration, change in status of activities in daily living, cognitive status and behavioural problems (Shapiro & Tate 1995, Phillips et al. 2004, Troyer 2004, Weech-Maldonado et al. 2006). The quality of nursing care in nursing homes has improved over the last two decades although serious problems persist (Velasquez 2007). Research findings report nursing care problems such as inadequate pain management, pressure sores, malnutrition, urinary incontinence etc (Kayser-Jones & Schell 1997, Clarke et al. 1998, Ooi et al. 1999, Jones et al. 2004, Schnelle & Leung 2004). In his research Hasson (2006) stated that institutional nursing care deficiencies were identified in half of the inspections, most common by inappropriate staff behaviour and poor documentation process. Reports of inaccurate nursing care, according to the Fahey et al. (2003) consisted most often of improper medication, late or incorrect diagnoses, slip and fall accidents, poor cooperation between different caregivers resulting in unmet care needs, insufficient use of beneficial drugs, poor monitoring of chronic disease and overuse of inappropriate or unnecessary drugs.

Recognition of maltreatments caused to nursing home residents. There was no comprehensive definition of maltreatment of the elderly in the literature. Generally speaking, maltreatment refers to any intentional behaviour involving either physical or psychic force that causes an insult on an elder’s person or property and causes him/her to suffer (Fulmer et al. 2004). According to Pillemer & Moore (1989) and Lachs & Pillemer (2004), maltreatment in institutional custody consists of negligence in care and psychic or physical maltreatment. Negligence in care includes both intentional and unintentional failure to fulfil the elderly client’s basic needs and a failure to provide care. Failures may happen to take care of the elderly client’s basic hygiene, nutrition or necessary medication, or the client may be left alone without supervision for longer periods (Koch et al. 1995, Fahey et al. 2003). Those practices may occasionally also be used to punish excessively demanding clients. Such violence may make the elderly feel deprived of their human value (Braithwaite 2001). Physical maltreatment consists of actions that cause physical pain or injury, physical coercion or a perceived intention to cause physical pain or injury to another person. Psychic maltreatment consists of causing mental pain, distress or anxiety or a perceived intention to cause mental pain to another person.
by threatening or insulting (Pillemer & Moore 1989, Brandl & Horan 2002). Verbal maltreatment, such as threatening, shouting and vulgar language, may be even more traumatic than physical maltreatment, because the elderly may find it difficult to defend themselves against such behaviour (Wang et al. 2006).

Maltreatment in general and especially in nursing homes was rather difficult to recognize and to study in the past (Fulmer 2002, Meeks-Sjostrom 2004). Only vague statistical data exists about victims, ranging from 4–9% among all elderly population, with no systematic study in nursing homes (World Health Organization 2002, House of Commons Health Committee 2004). Maltreatment may primarily origin from outsight, from family members for example, in the first place linked to financial abuse. In a study conducted in nursing homes by Isola et al. (2008) staff members estimated negligence to be most common type of maltreatment, leaving residents unnecessarily alone was reported primarily. Of the types of physical maltreatment, unnecessary physical restraint was reported to be most common. Saarnio et al. (2008) reported that on various occasions restraints are being used too often and could be avoided.

Nursing staff members play an important role in preventing elder maltreatment, because they are often the first and only health care provider, who has access to residents that are being maltreated and abused. In addition, the trust and respect that residents have for nurses gives them opportunity to identify residents being maltreated, since residents often disclose their domestic abusive situations to them. However, nurses are often afraid to get involved, due to lack of adequate education or experience on how to intervene in cases of maltreatment and abuse (Thobaben 2008).

### 3.2 Synthesis from literature review

Studies retrieved by literature review that used more than one research method or included participants that presented different viewpoints are being summarised in more detail, in chronological order by publishing date (table 2). The summarised studies used similar approach to my study. The aim, sample, methods and main findings are being presented. Some studies reported more findings but only those relevant for this study are noted.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Aims of study</th>
<th>Participants</th>
<th>Design/methods</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Kayser-Jones &amp; Schell 1997, US</td>
<td>To analyze how an inadequate number of poorly supervised staff lacking in essential knowledge affected the meal-time experience of the NH residents.</td>
<td>Physicians (n=36), nursing staff (n=50), NH residents (n=58) from two NHs, and the families of residents (n=50).</td>
<td>Participant observation and qualitative analysis of in-depth interviews.</td>
<td>The quality of care at mealtime, while adequate for some residents, was on the whole poor, especially for the cognitively impaired, for dysphagic residents, and for residents without attentive families.</td>
</tr>
<tr>
<td>Caris-Verhallen et al. 1999, The Netherlands</td>
<td>To explore variables that might influence nurses’ communication with elderly patients.</td>
<td>Elderly people from NH and living at home (n=109) and nursing staff (n=47).</td>
<td>Questionnaires combined with the results of video-taped observations of nurse-patient interactions.</td>
<td>The educational level of nurses was related most strongly to the way nurses communicate with their elderly patients. Patient characteristics such as age, gender and subjective state of health appeared to play a minor role in the way nurses communicate.</td>
</tr>
<tr>
<td>Rantz et al. 1999, US</td>
<td>To discover the defining dimensions of NH care quality from the viewpoint of consumers.</td>
<td>NH residents (n=16) and family members (n=80).</td>
<td>Focus groups were video-taped and audio-taped and tapes were transcribed for analysis using method of constant comparison and analytic induction.</td>
<td>NH care quality is multidimensional and can be explained in a conceptual model that integrates the views of consumers and providers. To pursue quality, these dimensions must be of primary concern to the facility: central focus, care, staff, environment, communication, family involvement, and home.</td>
</tr>
<tr>
<td>Reed &amp; Morgan 1999, UK</td>
<td>To explore the area of support for older people being discharged from hospital into a care home.</td>
<td>Older people (n=20) and their family members (n=17), NH staff, hospital staff and social workers (n=23).</td>
<td>Structured and semi-structured interviews, focus groups</td>
<td>This study suggests that the apparent stoicism of older people moving into a care home can mask feelings of loss and anxiety. If nursing staff wish to support older people through this transitional process, then they may have to be proactive in initiating discussions rather than waiting for older people to do so.</td>
</tr>
<tr>
<td>Ryan &amp; Scullion 2000, Northern Ireland</td>
<td>To investigate family and NH staff perceptions of the role of families caring for residents in NH.</td>
<td>Family carers (n=44) and nursing staff (n=78) from 15 NHs.</td>
<td>Statistical analysis of structured questionnaires and content analysis using grounded theory of semi-structured interviews.</td>
<td>The results suggest that family carers perceived themselves to have a greater role in caring for relatives than that perceived by the NHs staff. The results indicate that families in this study were more willing to help in NH care and were perhaps undervalued as a resource within the NH setting.</td>
</tr>
<tr>
<td>Duffy et al. 2001, US</td>
<td>To examine if nonrecipients of NH services have the same set of expectations for service quality as the actual recipients.</td>
<td>NH residents (n=203) from 10 intermediate care facilities, NH administrators (n=97) and family members (n=57).</td>
<td>Statistical analysis of structured questionnaires.</td>
<td>Resident expectations are generally dissimilar to both administrator and family expectations while administrator and family expectations tended to be aligned.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Aims of study</td>
<td>Participants</td>
<td>Design/methods</td>
<td>Findings</td>
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<tr>
<td>Fahey et al. 2003, UK</td>
<td>To assess the quality of medical care given to elderly people and compare the care given to residents in nursing homes with those living in their own homes.</td>
<td>Elderly individuals being NH residents (n=172) and living at home (n=526) being clients of three practices.</td>
<td>Statistical analysis of computer and paper patient records.</td>
<td>The results suggest that elderly people in one UK city are receiving inadequate care. Inadequate care takes several different forms: insufficient use of beneficial drugs; poor monitoring of chronic disease; and oversuse of inappropriate or unnecessary drugs. Poor monitoring of disease and unnecessary drug prescribing are more likely to occur in NH residents than in people living at home, even after comorbidity and amount of prescribed medication are controlled for.</td>
</tr>
<tr>
<td>Isola et al. 2003, Finland</td>
<td>To report on the quality of institutional geriatric nursing as evaluated by family members in 2001 and to compare the responses to those obtained in 1998.</td>
<td>Staff (n = 509), residents (n = 1450) and family members (n = 618).</td>
<td>Statistical analysis of structured questionnaires.</td>
<td>The responding family members were generally content with the care of their elderly relatives. Family members were more content in 2001 than in 1998. In 2001 family members in 92% responded to be very satisfied or satisfied with care provision.</td>
</tr>
<tr>
<td>Port et al. 2003, US</td>
<td>To measure family involvement in NH care and to examine agreement between family and staff on the frequency of visits and telephone calls.</td>
<td>Pairs of significant others (n=823) and staff members (n=823)</td>
<td>Statistical analysis of structured interviews.</td>
<td>Significant other reports of visitation and telephone contact were significantly higher than staff reports.</td>
</tr>
<tr>
<td>Boyle 2004, Northern Ireland</td>
<td>To explore the extent to which the reforms actually enabled older people receiving domiciliary care to have greater choice and control in their daily lives than older people living in institutions.</td>
<td>Residents (n=214) in 45 residential and NHs and people receiving domiciliary care in private households (n=44).</td>
<td>Older people were interviewed using a structured interview schedule and subjective autonomy was assessed using a measure of perceived choice. The measure consisted of 33 activities relating to aspects of everyday life such as what time to get up, when to see visitors or friends, and how much privacy was available.</td>
<td>The study found that older people living in institutions perceived themselves to have greater decisional autonomy in their everyday lives than did older people receiving domiciliary care. Indeed, it was clear that living at home did not ensure that one’s decisional autonomy would be supported. However, living alone may facilitate exercising a relatively higher degree of autonomy when living at home.</td>
</tr>
<tr>
<td>Jacelon et al. 2004, US</td>
<td>To describe a concept analysis to develop a definition of dignity in older adults.</td>
<td>Older adults (n=23)</td>
<td>A literature review and five focus groups composed of older adults.</td>
<td>Following conceptual definition was proposed: dignity is an inherent characteristic of being human, it can be felt as an attribute of the self, and is made manifest through behaviour that demonstrates respect for self and others.</td>
</tr>
</tbody>
</table>
Table 2. Studies about institutional elderly care using more than one method or more than one point of view. Continued

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Aims of study</th>
<th>Participants</th>
<th>Design/methods</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schnelle et al. 2004, US</td>
<td>To compare NHs that report different staffing statistics on quality of care.</td>
<td>Two groups of NHs (n=21), nursing assistants (n=118), residents (n=233)</td>
<td>Direct observation, resident and staff interview, and chart abstraction methods.</td>
<td>An excellent case could be made that the highest-staffed homes provided better care. The highest-staffed homes performed significantly better on 13 of 16 care processes compared to lower-staffed homes.</td>
</tr>
<tr>
<td>Woolhead et al. 2004, UK</td>
<td>To explore the concept of dignity from the older person’s perspective.</td>
<td>Residents (n=72) from 12 NHs.</td>
<td>Qualitative approach by focus groups and individual interviews.</td>
<td>Examples of dignity being jeopardised rather than being enhanced were given. A loss of self-esteem arose from being patronised, excluded from decision-making, and being treated as an “object”. Lack of integrity in society meant that there was an inability to trust others and an increased vulnerability.</td>
</tr>
<tr>
<td>Sikorska-Simmons 2006, US</td>
<td>To examine the relationship between resident satisfaction and staff perceptions of the work environment.</td>
<td>Residents (n=335), staff members (n=298) in 43 assisted living facilities</td>
<td>Statistical analysis of structured questionnaires.</td>
<td>Greater resident satisfaction in the facility was associated with higher staff job satisfaction and more positive staff views of organisational culture. From resident characteristics, more educated residents were less satisfied with assisted living.</td>
</tr>
<tr>
<td>Hjaltadóttir &amp; Gústafsdóttir 2007, Iceland</td>
<td>To disclose the characteristics of quality of life as perceived by physically frail but lucid elderly people living in nursing homes to increase the understanding of the phenomenon of quality of life</td>
<td>Elderly residents (n=8) living in two NHs.</td>
<td>Hermeneutic phenomenological analysis interviews made on two occasions and observations.</td>
<td>The most important aspects of quality of life were for the residents to feel secure in the nursing home, have a place of their own where they could be alone with their thoughts, set their affairs in order and be prepared for death. Furthermore, it mattered to be recognized as an individual with his or her roots in their own respective family and doing meaningful things.</td>
</tr>
<tr>
<td>McGilton &amp; Boscart 2007, Canada</td>
<td>To analyse perceptions of residents, family and care providers, with regard to close care provider–resident relationships in long-term care.</td>
<td>Residents (n=25) and their family (n=25) and care providers (n=32) from two units in a long-term care facility</td>
<td>Interviews were analysed using a comparative method.</td>
<td>Care providers, residents and family members defined close care provider–resident relationships differently. All groups spoke about the need for connectedness, but mentioned inadequate staffing and workload as barriers to care providers being able to create time for meaningful one-on-one relationships.</td>
</tr>
<tr>
<td>Teet et al. 2008, Finland</td>
<td>To describe and compare the views of nurses and older patients’ relatives on factors restricting the maintenance of patient integrity in long-term care.</td>
<td>Nurses (n=222) and relatives (n=213) of older patients in four long-term care institutions.</td>
<td>24-item structured questionnaire addressing five sets of factors relating to patients, relatives, nurses, the organization and society. Data was statistically analysed.</td>
<td>Social factors emerged as the single most important item restricting the maintenance of patient integrity. Other key restricting factors included patients themselves: their inability to make decisions, forgetfulness, and difficulties with expressing themselves.</td>
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</table>

NH – Nursing home
Literature review retrieved majority of references regarding quality of institutional elderly care and quality of nursing care in nursing homes. Although my assumption was that both concepts about quality are linked, only few researches discussed this issue holistically. Available research findings were generally limited to one main concept, the reason for that might have been that concepts are difficult to connect or relations among them are self-evident. Here we have to point out the individual perspective, where some residents related quality of institutional elderly care to quality of life entirely and others only partially. The researched literature does not provide much guidance as to the effectiveness of strategies to provide quality. It was reported that quality improvement strategies may also require substantially more resources and would increase costs.

By entering nursing home quality of life expectations reduce significantly. Residents’ expectations are from then on primarily related to their health, especially in cases of dependence. Quality of nursing care presents first step to achieve quality institutional elderly care and furthermore quality of life. Commonly used variables for measuring quality of nursing care in various researches were: pressure ulcers or pressure sores, nutritional status, change in activities of daily living status, cognitive status and mood decline. Quality institutional elderly care was also found in association with residents’ satisfaction and safety. Especially popular are statistical data analysis in US, where RAI system and MDS are used while Europe lags behind since institutional elderly care lacks directives. If no improvement is achieved, each member state will have to provide its own solutions. Present quality measurement systems are of instrumental nature and do not cover psychosocial aspects of institutional elderly care and subjectivity of quality of life.

Nursing home residents have been also included in many studies about various quality indicators. As it seems, it is difficult to provide new knowledge about quality of institutional elderly care from the resident point of view alone. On the other hand, relatives were not included severally and their role is not clear, although it is impossible to define general role because some people have very good caregiving abilities while others do not, and are therefore afraid to participate or just have no interest to participate. Physical participation to nursing care provision was reported difficult due to possible friction with nursing staff members and legislation in case of incidents. Nevertheless, there may exist some options for alternative cooperation, if staff members and nursing home organisations would participate by provided legislative regulations.
Research findings in majority conducted that role of relatives should be external, to emotionally support, to foster family ties and to observe or monitor treatment of nursing home residents. Residents found very important to spend time with family members and friends as well as to have a good relationship with their families. It is therefore very important that nursing home staff members support family ties and residents’ feelings as a family member and that the relatives and friends are welcome into the nursing home environment.

The role of nursing staff members in nursing care provision was tempered to skills difficult to learn, like self-sacrifice or communication. For adequate support or representation of residents in various issues, knowledge in advocacy was found to be needed. One of the greatest challenges in institutional elderly care presents the problem of ensuring sufficient and competent staff. Some countries already reported problems with the recruitment of nurses for older people care, because occupation is unattractive (Nordam et al. 2005) and in Slovenia also wages are below average. To improve nursing care provision it is necessary to increase personnel work satisfaction and decrease work-related stress.

Maltreatment of older people was not well researched, especially due to delicate nature of this issue. Especially difficult proved to be maltreatment research in nursing homes due to various existing perceptions. For example, staff members may be afraid to report cases due to anxiety to lose their job, relatives may be afraid of further retaliation to the resident and residents are seldom in position to make convenient report due to various health problems. Only vague statistical data of victims exists, ranging from 4 to 9% among all elderly population. In most cases origin of maltreatments was reported at home, perpetrators were family members, primarily of financial reasons. If such cases emerge in nursing home staff members must play advocacy role and protect resident form their family. Modern research papers in majority authors used references from two decades ago, proving how scarce research findings were.

According to literature review research findings were summarised and presented in figure 1. Some characteristics were brought in connection to quality of institutional elderly care by different points of view and are therefore marked in all three columns. If a characteristic is marked by light grey colour in a column it means that it was specified as quality indicator when researched from this point of view. Characteristics of nursing care are summarised, if they were measured as quality indicators in one or more studies by various qualitative or quantitative methods. Characteristics listed in figure 1 are not ordered by any kind of significance.
Quality institutional elderly care:

<table>
<thead>
<tr>
<th>Residents</th>
<th>Relatives</th>
<th>Nursing staff</th>
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<tbody>
<tr>
<td>resident education</td>
<td>informal communication</td>
<td>staff education</td>
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<tr>
<td>staff shortage</td>
<td>homeliness</td>
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<tr>
<td>close family relations</td>
<td>developing resident relations</td>
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<td>emotional well-being</td>
<td>enjoyment</td>
<td></td>
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<tr>
<td>possibility to participate in decision making</td>
<td>co-operation in nursing care provision</td>
<td>well-being</td>
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<td>staff turnover rates</td>
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<td>job satisfaction</td>
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<td>organisation of work</td>
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<td>being helpful to others</td>
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<td>physical comfort</td>
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<td>meaningful activities</td>
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<td>respect and dignity</td>
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<tr>
<td>autonomy</td>
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<td>privacy</td>
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<tr>
<td>security</td>
<td></td>
<td></td>
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<tr>
<td>skill mix (competent staff)</td>
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</table>

Quality nursing care:
- effective communication
- activities of daily living
- prevention of neglect
- staff/resident ratio
- mental training
- nutrition
- individual care
- safety
- prevention of pressure sores or pressure ulcers
- prevention of mood decline
- recognition of pain
- documentation
- prevention of malnutrition
- monitoring of chronic disease
- prevention of overuse of inappropriate or unnecessary drugs
- prevention of physical restraints

Fig. 1. Characteristics conducted from studies on quality of institutional elderly care and quality of nursing care from the residents, relatives and nursing staffs’ points of view.

According to the literature review and to understand the general theme of this study main theoretical concepts were described as:

*Quality of institutional elderly care in nursing homes.* Quality of institutional elderly care was addressed beyond quality nursing care. All involved parties in institutional elderly care (residents, relatives and nursing staff) have been interviewed to introduce their view what constitutes life in nursing home and how they understand or define this issue.
Quality of nursing care. The concept of quality nursing care was addressed as the first stage to achieve quality institutional elderly care. It referred to nursing staff willingness, knowledge and skills to meet various residents’ needs, related to physical and psychosocial care, recognition of maltreatment and staff well-being.
4 Purpose of the study, research questions and study design

The purpose of this study is to research the quality of institutional elderly care and elderly care offered in Slovenian nursing homes using qualitative and quantitative research methods. Quality of institutional elderly care is evaluated by using the qualitative research method from the residents, relatives and nursing staff members’ point of view. Additionally, a quantitative part of the study with nursing staff members is conducted concerning their ability to meet the residents’ needs and about their knowledge and skills. A part of quantitative research concerns the recognition of maltreatment of residents and well-being of staff members. The study aims to produce knowledge in form of proposals on how to meet quality institutional elderly care in Slovenian nursing homes. The produced knowledge can contribute to development of institutional elderly care and to improvement of dwelling in nursing homes. The obtained findings can also be used to educate nursing staff how to approach to institutional elderly care.

4.1 Qualitative part of the research

The purpose of the first part of the study is to research the quality of institutional elderly care and elderly care offered in Slovenian nursing homes from residents, relatives and staff members’ point of view. The interview topics are presented by the following research questions:

a) From the residents’ point of view:
   1. How does the residents’ dwelling in nursing home define the quality of institutional elderly care?
   2. What kind of institutional elderly care is being offered to nursing home residents?

c) From the relatives’ point of view:
   1. How do the relatives visiting residents in the nursing home define the quality of institutional elderly care?
   2. What kind of institutional elderly care is being offered to nursing home residents?

c) From the nursing staff members’ point of view:
   1. How do the nursing staff members define quality of institutional elderly care?
2. What kind of institutional elderly care is being offered to nursing home residents?

The purpose of this part of the study is self-evaluation of nursing staff members to verify results conducted by interview analysis. A questionnaire measuring five instruments is being used, four instruments measure quality of nursing care and fifth instrument measures staff well-being:

1. How well the nursing staff considers themselves to be able to meet the needs of nursing home residents?
2. How adequate the nursing staff considers their knowledge and skills to meet the needs of nursing home residents?
3. How important the nursing staff considers helping nursing home residents to meet their needs?
4. How often the nursing staff recognises maltreatment of the nursing home residents?
5. What is the level of well-being among the nursing staff working in nursing homes?

The first step of the designed research process presents a literature review aimed to obtain present knowledge about quality of institutional elderly care and quality of nursing care in nursing homes. The second step presents the realisation of the interviews about quality of institutional elderly care in nursing homes from the involved parties’ point of view. The third step presents realisation of the quantitative self-evaluation of nursing staff members. The obtained findings are analysed by qualitative content analysis method and partially compared to statistical results of quantitative analysis. Finally, proposals to meet quality institutional elderly care in Slovenian nursing homes are ascertained. A brief design of the research process is shown in figure 2.
Fig. 2. Research process of collecting data and applying methods.

- Interviews (N=48):
  - residents (n=16)
  - relatives (n=16)
  - staff members (n=16)

- Questionnaires (N=148):
  - staff members

- Slovenian nursing homes (N=4)

- Testing context of the five instruments (N=10):
  - staff members

- Ascertain proposals for quality of institutional elderly care in Slovenian nursing homes

- Qualitative content analysis
- Quantitative statistical analysis
- Comparison of variables connected to physical and psychosocial care
- Recognitions of maltreatment
- Staff members’ well-being
5 Methodology

In Chapter 5 descriptions and definitions of research methods used in this study are presented. Qualitative and quantitative methods used are defined in chapters 5.1.1, 5.1.2 and 5.1.3, respectively. Chapter 5.2 is bound for sampling and data collection procedures and detailed description how obtained data was analysed by using research methods. Chapter 5 is concluded by ethical considerations.

5.1 Methodological aspects of the study

Qualitative research was chosen as the most suitable approach for this study since very old and frail people were involved. It was found more convenient for older people to give statements and orally describe some phenomenon (Burnside et al. 1998, Grasser & Craft 2000, Bergland & Kirkevold 2006). Furthermore elderly people are not used to answering structured questionnaires because they sometime have difficulties to understand the questions asked. To research institutional elderly care from different viewpoints relatives and nursing staff members were also included in qualitative research. For further insight to institutional elderly care phenomenon and for the purpose of physical and psychosocial nursing care evaluation, nursing staff members were involved in additional quantitative research.

Collected data was examined by different methods and by different groups of respondents in order to corroborate findings across data sets, and to reduce the impact of potential biases that can exist in a single study. Triangulation was used for data analysis to synthesize data from multiple sources. By the use of qualitative method research, proposals for quality institutional elderly care in Slovenia were ascertained and categories presented that play important part of quality institutional elderly care. Additionally, statistical analysis was performed by self-evaluated questionnaire of nursing staff members to obtain differences regarding the importance of staff members’ physical and psychosocial needs of institutional elderly care and by their education and nursing home wards. Recognition of maltreatment to residents and staff well-being was also statistically analysed.

Qualitative and quantitative studies are fundamentally different approaches to research and therefore need to be approached differently with regard to critiquing (Ryan et al. 2007). There are a growing number of authors who argue that there is a case for integrating qualitative and quantitative research methods (Barbour 1999, Burnard & Hannigan, 2000, Bourgeois 2002). These two types of research are
designed to answer different sorts of questions, collect different types of data and produce different types of answers (Barbour 1999). Researches have combined the two approaches for a variety of reasons: for meeting different needs at different stages of a project; compensating for shortcomings by using only one method and use of triangulation (Mason 1993, Ong 1993, Barbour 1999, Perrett 2007). Even by combination of two research methods is sometimes difficult to answer all questions relevant to the evaluation and assessment of increasingly complex healthcare (McPherson 1994, Black 1996, Murphy et al. 1998, Kelly & Long 2000, Bourgeois 2002). Quantitative instrument is of a bound nature, already tested many times before, usually without surprising results. In general, quantitative instruments are used to confirm results of previous researches or to additionally support formulations of qualitative analysis.

5.1.1 Qualitative research

Qualitative research was used to obtain findings related to quality of institutional elderly care and elderly care offered in Slovenian nursing homes from different points of view. As a part of qualitative research content analysis method was used to analyse transcribed content of voice recorded interviews. The procedure of content analysis is described in chapter 5.2.1.2.

The choice of qualitative research in this study was connected to the purpose to research institutional elderly care and obtain concepts linked to this phenomenon. Qualitative methods proved to be more suitable for provision of new knowledge and deeper understanding of human experiences (Bowers et al. 2001b, Foss & Ellefsen 2002, Westin & Danielson 2007). On the other hand, a major disadvantage of qualitative methods proved to be their replication (Polit & Beck 2004). An additional disadvantage proved to be the provision of generalizability and objectivity due to personal perceptions of the researcher (Polit & Beck 2004). The aim of this study was not to yield a wide-ranging generalisation, but to obtain important issues about institutional elderly care in Slovene national context. Human phenomena are ever-changing and insights must be expected to show some natural variance over time (Begley 1996).

Qualitative research methods are used across a range of disciplines such as the social sciences, management and nursing and are beginning to be used more widely in the biomedical sciences (Topping 2006). The use of qualitative methods within nursing research began in the 1960s as a humanistic trend throughout the social sciences. Qualitative methods present information in a way that makes the
stories or experiences of individual patients accessible to nurses and is close to their own practice experiences (Cohen et al. 2002). Streubert & Carpenter (2003) pointed out that qualitative methods enable full exploration of the patients’ experiences, paying particular attention to relationships and values. This approach shares information in a way that makes patient stories readily accessible to nurses and relevant to their care experiences (Cohen et al. 2002).

Qualitative research shares its philosophical underpinnings with the naturalistic paradigm which describes and explains a person’s experiences, behaviours, interactions and social contexts without the use of statistical procedures or quantification (Strauss & Corbin 1990). Defining qualitative research, however, is often made more difficult by the absence of a common, unified set of techniques, philosophies or underpinning perspectives (Mason 1996). It is often used to explore a phenomenon that has not been previously well described. The results are then used to develop survey instruments (Risjord et al. 2001).

The term “qualitative research” encompasses a variety of designs and methods. Nevertheless, the various designs generally have the following features in common: a holistic approach to questions – a recognition that human realities are complex; the focus is on human experience; the research strategies used generally feature sustained contact with people in settings where those people normally spend their time; there is typically a high level of researcher involvement with subjects for strategies of participant observation and in-depth, unstructured interviews are often used; the data produced provide a description, usually narrative, of people living through events in situations (Oiler-Boyd 2001).

Qualitative research may be described as involving broadly stated questions about human experiences and realities, studied through sustained contact with persons in their natural environments, and producing rich, descriptive data that help us to understanding that will, in turn, open up new options for action and new perspectives that can change people’s worlds (Rees 1996, Dingwall et al. 1998). Qualitative research aims to allow the questions and the data to reveal themselves as they are in a natural system, which may be a “culture” or the “life-world” of an individual, to reveal and to understand that which may be hidden from everyday awareness (Oiler-Boyd 2001). It could be argued that qualitative researchers are more concerned about uncovering knowledge about how people feel and think in the circumstances in which they find themselves, than making judgements about whether those thoughts and feelings are valid (Cole 2006).
Qualitative methods allow researchers to explore worlds of experience and meaning, and find answers to many questions of special importance to the practice of health profession. Heightened awareness yields opportunities to improve health care experiences, and by extension, associated outcomes (Donalek & Soldwisch 2004). As such, qualitative research is an important contributor to evidence based nursing and professional practice.

Qualitative research reports humanize health care. Written research reports put nurses in touch with patient and caregiver experiences in meaningful ways that are rich with detail, in contrast to the reductionist data of quantitatively designed studies. Qualitative studies also lay the foundation for instrument development and evaluation. Qualitative approaches play an important role in the education of concepts and the definitions of key terms that facilitate the meaningfulness of subsequent quantitative studies (Zuzelo 2007).

5.1.2 Quantitative research

The use of quantitative research in this study was to support and to verify qualitative research findings. Since only nursing staff members were subject of quantitative assessment, partial support and verification was applied. Percentage distributions and sum variables were calculated for the ability, knowledge and skills of nursing staff to meet residents’ needs, for the importance of individual needs and for the recognition of maltreatment and staff well-being. Finally, some statistical tests have been calculated to compare needs of physical and psychosocial care by education and nursing home wards. Since study instruments were used many times before, the approach was deductive to compare the findings to previous international results and to support the research questions of qualitative study. Detailed information about quantitative statistical research is given in chapter 5.2.2.2.

Advantage of quantitative over qualitative analysis is to scientificaly provide results or important links that may provide objective and quantifiable indices for evaluation purposes (Merkouris et al. 2004). Major interest in this study was oriented to statistically analyse nursing staff members’ abilities or perceptions to meet physical and psychosocial needs of residents. Many previous researches about this issue found that psychosocial needs of residents were considered less important or even neglected (Holkamp et al. 2001, Voutilainen et al. 2004, Isola et al. 2008).
Quantitative research is also known as the traditional scientific approach to research (Walker 2005) and it is an essential part of health services research, commonly used in clinical and biomedical research (Meadows 2003). Often, the numerical data produced in quantitative research can be statistically manipulated in order to confirm the original hypotheses or research question. This kind of research involves experiments and surveys, where data are collected using standardized methods such as questionnaires and structured interviews. The data are in the form of numbers from which statistical generalizations can be made. Key characteristic of quantitative research are that much of it is pre-specified in terms of what and how is going to be done (Robson 2002) and that the approach is deductive (where data are specifically collected for the purpose of testing ideas and hypotheses) rather than inductive (where ideas and generalizations emerge from the data).

Parahoo (1997) identified three levels of quantitative research: descriptive, correlation and causal. In this study descriptive in correlational research was used, firstly to conduct nursing staff strengths and weaknesses with regard to various items and secondly to examine links that may explain assessments of items. Descriptive research provides an account of the characteristics of individuals, groups or situations (Jack & Clarke 1998) that may form the first stage of more complex designs (Clifford 1997, Carter 2000). The overall aim is to “discover new meaning, describe what exists, determine the frequency with which something occurs and categorize information” (Burns & Grove 1999). In correlational research, the investigator deliberately seeks to examine links (or relationships) between variables without introducing an intervention. The purpose is often to generate hypotheses that can be tested by further quantitative research (Parahoo 1997, Burns & Grove 1999). Research designs involving quantitative measures can make a valuable contribution to the evidence-base required. Both descriptive and correlational designs have a key role to play in the development of new knowledge, generating questions and hypotheses that could form the basis of further research (Walker 2005).

5.1.3 Triangulation

To gather data for the study two types of triangulation techniques have been used. Data triangulation was considered to gather data about institutional elderly care phenomenon from three different points of view that of residents, relatives and nursing staff (person triangulation). Methodological triangulation was considered,
since data were collected by empirical interviews and structured questionnaires (between methods triangulation).

Although there are various types of triangulation, many authors focus their debate on methodological triangulation (Rose & Webb 1997, Barbour 1999, Foss & Ellefsen 2002). In this study importance was given to qualitative over quantitative analysis of data (Pomerantz et al. 1997, Razum & Gerhardus 1999). Quantitative analysis was used for confirmation (Shih 1998). As already described the main reason using qualitative research was due to involvement of elderly people and abilities of qualitative research to provide more reliable data with such population (Bergland & Kirkevold 2006).

The term “triangulation” was introduced in the field of social sciences as a metaphor to describe the use of multiple methods (Shih 1998) to enhance the process of empirical research. The process of triangulation became characterized by the combination of two or more theories, data sources, methods or investigators in the study of a single concept (Kimchi et al. 1991, Thurmond 2001). The purpose of the approach is to provide completeness and confirmation, consequently increasing the validity and reliability of studies through increased trustworthiness of the data and its interpretation (Breitmayer et al. 1993). A major focus of nursing research is to provide evidence upon which to base clinical nursing practice. While triangulation may be a source of methodological and philosophical controversy among nursing scholars, its application has the ability to inform nursing research in such a way as to be valuable in guiding nursing practice (Halcomb & Andrew 2005). Combinations may involve a single methodological approach (for example, quantitative or qualitative) or may mix approaches (quantitative and qualitative) within the research design.

The major aims of triangulation are to provide confirmation and completeness of data by overcoming the biases inherent in a single-investigator, single-theory or single-method approach (Kimchi et al. 1991, Brannen 1992, Foster 1997). Denzin (1989) describes five forms of triangulation: methodological triangulation, theoretical triangulation, data triangulation, investigator triangulation and multiple triangulations.

The methodological triangulation is used if more than one data collection method in the study of a particular social phenomenon proves essential. It can be divided into two subtypes: “within-method triangulation” and “between methods triangulation”. The first subtype refers to the use of more than one technique of data collection within a particular methodological approach. Thus, a nurse researcher might use both Likert scales and visual analogue scales in a
questionnaire designed to measure attitudes to contemporary reforms in health policy, or might use both, group and individual interviews in an ethnographic study of socialization in nurse education (Sim & Sharp 1998). In contrast, second subtype involves the use of both qualitative and quantitative approaches to measure the same variable (quantitative measurement scale and qualitative interview, for instance) (Corner 1991, Kimchi et al. 1991, Oiler-Boyd 1993, Nolan & Behi 1995, Begley 1996, Thurmond 2001). The advantage of methodological triangulation is that the weaknesses of one method or theoretical approach can be compensated by the strengths of the other (Sohier 1988, Corner 1991, Oiler-Boyd 1993, Morgan 1998, Malterud 2001, Thurmond 2001). This commonly appears where qualitative interviews or focus groups provide a greater insight into the meaning behind the findings obtained from quantitative surveys or measurement scales.

Data triangulation uses multiple data sources focused on a similar phenomenon to provide diverse information about the phenomenon (Mitchell 1986, Corner 1991, Kimchi et al. 1991, Oiler-Boyd 1993, Nolan & Behi 1995, Begley 1996, Shih 1998). Data triangulation can be further divided into three types: time, place and person (Kimchi et al. 1991). Time triangulation involves the measurement of the same phenomenon over time, where time is relevant to the study. This is unlike a longitudinal study, where changes are documented over time, but rather aims to provide congruence of the same phenomenon across different points in time (Corner 1991, Kimchi et al. 1991, Begley 1996, Thurmond 2001). Space triangulation is conducted where data are collected at two or more sites with the specific purpose of testing multi-site consistency and ruling out cross-site variation (Corner 1991, Kimchi et al. 1991, Begley 1996). Person triangulation involves the collection of data from at least two of the three levels of people – individuals, groups (dyads, families or groups), or collectives (communities, organisations or societies) (Corner 1991, Kimchi et al. 1991, Brannen 1992, Begley 1996).

When more than one type of triangulation is employed within a study design in the analysis of a single phenomenon, it can be described as multiple triangulations (Mitchell 1986, Sohier 1988, Kimchi et al. 1991, Dootson 1995, Thurmond 2001). Multiple triangulation serves to further validate the findings and gather a more comprehensive insight into the phenomenon by combining the advantages of each type of triangulation (Kimchi et al. 1991, Thurmond 2001).
5.2 Data and methods

Study data was gathered by empirical interviews and by structured questionnaire. Empirical interviews were used for qualitative content analysis and structured questionnaires for quantitative statistical analysis. According to the results of content analysis proposals to meet quality institutional elderly care in Slovenian nursing homes were ascertained. Quantitative statistical analysis comprised scaled evaluation of single items of each instrument and some relations between issues regarding physical and psychosocial care together with comparison by education and nursing homes wards. The brief research process is shown in figure 2.

Data sample was selected by purposive or judgmental sampling in consideration of demographic data. Subjects were selected who were judged to be typical of the population or particularly knowledgeable about the issues of institutional elderly care in nursing homes. Purposive sampling is based on the belief that researchers’ knowledge about the population can be used to hand-pick sample members (Polit & Beck 2004).

5.2.1 Qualitative methods

Qualitative content analysis, as a method of qualitative research, was used to ascertain proposals to meet quality institutional elderly care in Slovenian nursing homes. Data gathered by voice recorded interviews were transcribed verbatim, and by use of content analysis method, divided to codes, formulated to subcategories, main categories and finally to single core category.

Content analysis presents a standard analysis method in the various sciences for studying the content of communication. It presents systematic analysis of the content of narrative data to identify prominent themes and patterns among the themes. Qualitative content analysis involves breaking down data into smaller units, coding and naming the units. However, as Polit & Beck (2004) pointed out, content analysis is more complex and difficult than quantitative analysis because it is less standardized and formulaic.

Content analysis seeks to analyze information by written, verbal or visual communication messages by systematic, objective and reliable means (Krippendorff 1980, Cole 1988, Guthrie & Parker 1989). Data are most often interviews, but may also include observation, music, art, photos, videos, crafts, tools, newspapers, or any other artefact that expands human understanding (Denzin & Lincoln 2000). The aim is to attain a condensed and broad description
of the phenomenon, and the outcome of the analysis are concepts or categories describing the phenomenon. Usually the purpose of those concepts or categories is to build up a model, conceptual system, conceptual map or categories (Elo & Kyngäs 2008). The method has several major benefits: it is content-sensitive (Krippendorff 1980) and flexible in terms of research design (Harwood & Garry 2003). Also, it can be used to develop an understanding of the meaning of communication (Cavanagh 1997) and to identify critical processes (Lederman 1991).

Content analysis method may be used with qualitative or quantitative data and in an inductive or deductive way (Elo & Kyngäs 2008). It involves codifying qualitative and quantitative information into pre-defined categories in order to derive patterns in the presentation and reporting of information. The key feature of all content analysis is that many words of the text are classified into much smaller content categories (Weber 1990, Burnard 1996). There are no simple guidelines for data analysis: each inquiry is distinctive, and the results depend on the skills, insights, analytic abilities and style of the investigator (Hoskins & Mariano 2004). For effectiveness of content analyses some of technical requirements should be met. The categories of classification should be clearly and operationally defined. Objectives should be clear in a manner that item either belongs or does not belong to a particular category. The information should be quantified and a reliable coder is necessary for consistency (Guthrie et al. 2004).

Challenge of content analysis is the fact that it is very flexible and that there is no simple or “right” way of doing it. Researchers must judge what variations are most appropriate for their particular problems (Weber 1990). All approaches to qualitative content analysis require a similar analytical process of some suggested steps, including formulating the research questions to be answered, selecting the sample to be analyzed, defining the categories to be applied, outlining the coding process and the coder training, implementing the coding process, determining trustworthiness, and analyzing the results of the coding process (Kaid 1989).

Qualitative content analysis can be composed by inductive or deductive approach. The inductive approach is recommended if there is not enough former knowledge about the phenomenon or if this knowledge is fragmented and the categories are derived from the data (Elo & Kyngäs 2008). An approach based on inductive data moves from the specific to the general, so that particular instances are observed and then combined into a larger statement (Chinn & Kramer 2007). Deductive content analysis is used when the structure of analysis is operationalised on the basis of previous knowledge and the purpose of the study is theory testing.
(Kyngäs & Vanhanen 1999). A deductive approach is based on an earlier theory or model and therefore it moves from general to the specific (Burns & Grove 2005).

Inductive analysis process is represented by three main phases: preparation, organizing and reporting (Elo & Kyngäs 2008). The preparation phase starts with selecting the unit of analysis (Cavanagh 1997, McCain 1998, Guthrie et al. 2004). Graneheim & Lundman (2004) pointed out that the most suitable unit of analysis is whole interviews or observational protocols that are large enough to be considered as a whole and small enough to be kept in mind as a context for meaning unit during the analysis process. When starting the analysis, the researcher must also decide whether to analyze only the manifest content or the latent content as well. According to Robson (1993), researchers are guided by the aim and research question of the study in choosing the contents they analyse. Next in the analytic process, the researcher strives to make sense of the data and to learn “what is going on” (Morse & Field 1995) and obtain a sense of whole (Tesch 1990, Burnard 1991). After making sense of the data, analysis is conducted using an inductive or deductive approach (Kyngäs & Vanhanen 1999).

Based on the above descriptions it can be said that content analysis is extremely well-suited for analyzing the multifaceted, sensitive phenomena characteristic of nursing. An advantage of the method is that large volumes of textual data and different textual sources can be dealt with and used in corroborating evidence (Elo & Kyngäs 2008).

**Interview sample and data collection**

The study sample was gathered in three nursing homes in the north-eastern part of Slovenia and one in the capital town Ljubljana. Three of them were public nursing homes and one a private nursing home with concession. This selection was made according to percentage distribution by residents dwelling in public and private nursing homes in Slovenia (Skupnost socialnih zavodov Slovenije 2006). In each nursing home four residents, relatives and staff members were interviewed once, making together a sample size of forty-eight participants (N=48).

The criteria for the realization of interviews with residents of nursing homes were the age of 75 years and more, constant dwelling in nursing home for at least two years, mobile or immobile but able to hear and speak clearly, without mental problems/cognitive disability and able to give critical opinions with regard to their needs and wishes. In each nursing home interviews with four residents were made, making together the sample size of sixteen residents (n=16). Each elderly was
personally asked for participation in the research, discretion of the results was
guaranteed. Four of the interviewers were men, all the others women (Statistični
letopis 2006). Additionally, health condition of residents was considered, where
four of interviewed residents dwell in residence ward and twelve in nursing ward
(Skupnost socialnih zavodov Slovenije 2006).

Criterion for the selection of relatives for the interviews was to be a closer
family member; wife, husband, son or other person, important for the resident. An
additional criterion was that all invited relatives to participate in interviews were
frequent visitors, being in nursing home at least twice a week. From each nursing
home four relatives participated in the study, totalling in sample size of sixteen
relatives (n=16). Twelve of the relatives had their elderly resident dwell in nursing
ward and four in residence ward (Skupost socialnih zavodov Slovenije 2006).
The relatives were selected by head nurses by help of nursing staff.

Criterion for the selection of staff members for the interviews was to have at
least ten years of working experiences in nursing home. A sample of eight
caregivers, four nursing assistants and four registered nurses participated in this
interview, four from each nursing home. The total sample size consisted of sixteen
nursing staff members who were interviewed (n=16) Members of the nursing head
staff were not included in the interview because of the opinion that they were too
much occupied with other responsibilities, and were not in daily touch with
residents. All participants were women. Selection of nursing staff was made
according to nursing home employee education scheme.

Data collection. The study data were collected in the period from the middle
of December 2006 till April 2007. Interviews started with informal conversation,
the explanation of purpose of the research questions and guaranty of security and
confidence of data. All the participants agreed to the discreet voice recording of
their statements. After ensuring the individuality, without the presence of the third
person, the actual interview started. Participation in the study was voluntary.

The interview topics were exploring areas linked to qualitative research
questions (appendix 1). All interviews lasted from 50 to 100 minutes. All the
participants kindly collaborated, the atmosphere during the interviews was
pleasant and there were no problems in understanding and conversation.
Interviews started by asking for cooperation in the study and none of the
interviews was aborted. For the interviews with nursing staff members, individual
time schedules were selected in order to decrease disturbance with their work to a
minimum.
Qualitative content analysis process. Content analysis method was conducted separately for each point of view (residents, relatives and nursing staff). Codes, subcategories and main category were formulated. Each code was supported by authentic citations. Inductive approach of qualitative content analysis was used since it was not my aim to test existing models of quality elderly care or to group expressions according to existing data about elderly care phenomenon. Nevertheless extracted terms by literature review were used for easier and understandable selection of subcategories.

The procedure of content analysis started with verbatim transcription of the interviews. The transcribed interviews were read several times to obtain an overall sense of the context. In the next step the authentic words or expressions with similar content were coded. These codes constituted the subcategory headings. The purpose of creating categories was to provide means for description of phenomenon, to increase understanding and to generate knowledge (Cavanagh 1997). The last step of the analysis was to group similar subcategories to bigger groups and finally to main categories (Robson 1993, Kyngäs & Vanhanen 1999, Elo & Kyngäs 2008). Subcategories were formed through logical induction and terms in connection to institutional elderly care phenomenon extracted by literature review. During the coding two levels of subcategories were defined and the abstraction process was finished in four levels (codes, two levels of subcategories and main categories). Results of coding process are presented in appendix 3.

5.2.2 Quantitative methods

To analyse structured questionnaire assessments of nursing staff members’ quantitative statistical analysis was conducted. Percentage distributions and mean values of measured instruments were calculated, sum variables were formed to calculate relations between needs of physical and psychosocial care. Also statistical tests were made to calculate differences in nursing care perceptions, maltreatments and nursing staff well-being, by education and nursing home wards.

Sample and data collection. The data was collected in Slovenia by structured questionnaire of nursing staff members from two major cities: Ljubljana and Maribor with surroundings. The study sample consisted of 148 staff members employed at three public and one private nursing home. According to Slovenian Society of Social Institutions records, 86% of staff members employed in public nursing homes and 14% in private nursing home with concession, were surveyed
It was also considered that in 2006, Slovenian nursing homes personnel constituted in 90% of female and 10% of male members. About 50% of them worked in nursing ward and around 25% in residence ward and dementia ward, respectively. It was difficult to select appropriate educational scheme among respondents, since every year higher education among staff members advances. The complete background data is presented in table 3. By the educational level in Slovenia registered nurses had to finish nursing college, nursing assistants’ secondary school and caregivers vocational school (Zbornica zdravstvene in babiške nege Slovenije 2008). The sample size of 148 nursing staff members presented about 5% of Slovenian workforce in nursing homes.

### Table 3. Background information of surveyed participants.

<table>
<thead>
<tr>
<th>Background</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>134</td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Caregiver</td>
<td>62</td>
</tr>
<tr>
<td>Nursing assistant</td>
<td>72</td>
</tr>
<tr>
<td>Registered nurse</td>
<td>14</td>
</tr>
<tr>
<td>Institution status</td>
<td></td>
</tr>
<tr>
<td>Public social institution</td>
<td>127</td>
</tr>
<tr>
<td>Private social institution with concession</td>
<td>21</td>
</tr>
<tr>
<td>Ward</td>
<td></td>
</tr>
<tr>
<td>Residence ward</td>
<td>31</td>
</tr>
<tr>
<td>Nursing ward</td>
<td>83</td>
</tr>
<tr>
<td>Dementia ward</td>
<td>34</td>
</tr>
<tr>
<td>Age (years)</td>
<td>37.3 ± 8.6</td>
</tr>
<tr>
<td>Nursing experiences (years)</td>
<td>13.3 ± 9.0</td>
</tr>
<tr>
<td>Experiences in present job (years)</td>
<td>11.0 ± 8.5</td>
</tr>
</tbody>
</table>

The data were collected in the period from the middle of December 2006 till March 2007 by the use of structured questionnaire. The agreed number of questionnaires was sent by regular post to the head nurse of each nursing home (together 150 questionnaires). Head nurses distributed the questionnaires among nursing staff members. In case of some inquiry about questions in the questionnaire help was provided by the head nurse of the ward. After completed questionnaires were collected and examined for missing demographic data, 148
questionnaires were relevant for the analysis and the response percentage was 98.2%.

_instruments of the study_

The instruments were measuring 1) how well the elderly people individual needs are met, 2) the staff’s knowledge and skills concerning the way to meet the elderly clients’ needs and 3) how important do you consider to help elderly people to meet their needs. The instrument was a modification of the one developed by Voutilainen & Laaksonen (1994) based on need theories (Richard & Stern 1991, Roper et al. 1992). The instrument used to measure 4) the recognition of maltreatment of residents was formulated based on the instrument used by Isola and her colleagues (Isola et al. 1995). The instrument for 5) staff’s occupational well-being was approached via two themes: a) work-related stress and b) work-related well-being. The items of the instrument used to measure well-being were based on the studies previously made on this topic (Elo et al. 1990, Kivimäki & Lindström 1991, Kivimäki & Lindström 1992).

The structured questionnaire consisted of 69 items or questions (appendix 2). The respondents also answered questions on background data, including age, sex, professional education, work experience in general and in the current workplace.

Instrument 1: The amount of help given by nursing staff to meet their elderly clients’ individual needs was assessed with 14 items (items 9 – 22). The scale consisted of items on physical, psychological and social needs. The scale was a five-point Liker type scale, with 1 indicating that need was never met and 5 always. The higher the average score on the item, the better is the elderly client’s need satisfaction (Voutilainen & Laaksonen 1994).

Instrument 2: The adequacy of nursing staff’s knowledge and skills were assessed with 14 items (items 23 – 36). The scale was a four-point Liker type scale, with 1 indicating that the nurse had no knowledge at all to be able to help the elderly client, and 4 indicating that the nurse had enough knowledge to help the client. The adequacy of knowledge and skills was evaluated in the following sub domains of nursing: subjective safety of the care environment, expression of thoughts, experiences and emotions, breathing, eating and drinking, toileting, hygiene and dressing, mobility, maintenance of suitable temperature, sleep and rest, expression of sexuality, contacts with family, pain relief, discussion of difficult, anxiety-provoking matters, facing death (Voutilainen & Laaksonen 1994).
Instrument 3: The importance attached by the nursing staff to helping their elderly clients to meet their individual needs was assessed with the same scale that was used to assess the adequacy of knowledge and skills. On the Liker type scale, 1 indicated that item was not considered important at all in the field of nursing, while 4 indicated that the respondent considered it very important (Voutilainen & Laaksonen 1994).

Instrument 4: Altogether 23 items pertain to the recognition of maltreatment of residents (items 37–59). The nursing staff members were asked to indicate if they had witnessed instances of maltreatment of the elderly in their wards. Those who had witnessed such instances were asked to estimate the frequency of maltreatments. The response alternatives were: daily, once a week, at least once a month, seldom, never and cannot say. The respondents were asked to estimate the frequency of physical maltreatment (e.g. unnecessary physical restraint or rough handling), psychic maltreatment (e.g. verbal humiliation, criticism) as well as negligence in care (e.g. the elderly client does not receive the help s/he requests, the elderly client is not given enough to drink or is kept in wet incontinence pads too long) (Isola et al. 1995).

Instrument 5: The well-being of nursing staff was assessed with 10 items (items 60–69). Stressfulness of work was measured by a five-point Liker scale. The reply alternatives were: daily, once a week or more often, once a month or more often, less frequently and never. The staff’s occupational well-being was approached via two themes: a) work-related stress and b) work-related well-being. The items of the instrument used to measure well-being were based on the studies previously made on this topic (Elo et al. 1990, Kivimäki & Lindström 1991, Kivimäki & Lindström 1992).

The original five instruments questionnaire had been previously used in the Finnish language and was later translated to English language. Before being used in this study the questionnaire was translated from English to Slovene language. The translated questionnaire to Slovene language was pre-tested by ten members of nursing home staff members located in Maribor, acting as expert censors. The researcher asked the expert censors to read the instruments very carefully and to give comments about the context. The expert censors indicated that all items asked were understandable, logical and relevant for the instrument (Polit & Beck 2004). After their approval the questionnaire was distributed among study sample.

The instruments used in this study were designed by experts, and they have been used several times before and reliability proved to be sufficient (Kivimäki & Lindström 1991, Kivimäki & Lindström 1992, Voutilainen 1994, Isola &
Voutilainen 1998, Isola et al. 2001). The reliability of the instruments in this study was tested by Cronbach’s alpha coefficients (table 4). Based on the coefficients, all scales except that measuring staff well-being seemed to have good internal consistency (α > 0.70) (Nunnally & Bernstein 1994). The instrument measuring well-being of nursing staff was with α value of 0.68 just slightly below desired threshold.

Table 4. Cronbach’s alpha coefficients for the five instruments in the structured questionnaire.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Cronbach’s alpha coefficient</th>
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<tbody>
<tr>
<td>Meeting the elderly clients’ needs</td>
<td>0.78</td>
</tr>
<tr>
<td>Adequacy of staff knowledge and skills in meeting elderly clients’ needs</td>
<td>0.82</td>
</tr>
<tr>
<td>Staff’s view of the importance of the need to meet elderly clients’ needs</td>
<td>0.81</td>
</tr>
<tr>
<td>Maltreatment of elderly persons</td>
<td>0.89</td>
</tr>
<tr>
<td>The well-being of nursing staff</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Data analysis

The subject of statistical analysis was to gather further insight about the relations between physical and psychosocial care provision by nursing staff members. The items of the instruments measuring help given by nursing staff to meet their elderly clients’ individual needs, adequacy of nursing staff’s knowledge and skills and importance of skills in their field of nursing were predefined into two subcategories measuring physical or psychosocial care (tables 5, 6 and 8). For each subcategory sum variables were calculated by adding up the item assessments and dividing the calculated sum by the number of variables. The sum variables thus had the same scale as individual items. Consequently, the range of the sum variables was the same as that of the original questions (Teeri et al. 2008). The independent samples T tests were used to compare mean values of physical and psychosocial care. The ANOVA tests were used to compare mean values of physical and psychosocial care by education and ward. Relations between physical and psychosocial care to nursing experiences were calculated by the Pearson’s correlation coefficients.

An additional subject of interest was the perception or importance between physical and psychosocial care provision, that is, whether the staff members who find physical care more important also care for psychosocial needs more? To
obtain strength of relations between physical and psychosocial care the Pearson’s correlation coefficients were calculated.

Frequency and percentage distributions were used to show most common recognitions of maltreatments of residents and well-being of nursing staff members. Cross-tabulations ($\chi^2$ tests) were calculated to show differences in recognition of maltreatments and well-being of nursing staff members by education and ward.

The statistical calculation was made with SPSS (Statistical Package for the Social Sciences) software, version 15.0.1. SPSS supported all the statistical methods used in this study. P-value <0.05 was considered significant.

5.3 Ethical considerations

Ethically sound research should guarantee the protection of human rights. These include disclosure concerning the study, privacy, anonymity, confidentiality, fair treatment, protection from discomfort and harm, and self-determination (Kylmä et al. 1999). It is difficult to define ethical conduct in the context of qualitative interviewing in advance, as moral questions can arise at any time during the research process, being determined by changing levels of competence, types of disclosure, and the unintended consequences of growing emotional intimacy. From study design to data collection and publication, ethical conduct is not fixed, but needs to be continually responsive to personal, social and contextual constructions (Goodwin et al. 2003, Aita & Richer 2005).

Researchers should consider several issues before, during, and after the research has been conducted. Some of the issues involve the following: informed consent (do participants have full knowledge of what is involved); harm and risk (can the study hurt participants); honesty and trust (is the researcher being truthful in presenting data); privacy, confidentiality, and anonymity (will the study intrude too much into group behaviors); intervention and advocacy (what should researchers do if participants display harmful or illegal behavior) (Holloway & Wheeler 2002, Constable et al. 2005).

Qualitative and quantitative research started by sending a description of research plan to the general manager and the head nurse of the selected nursing homes. Approval for the study was then obtained locally from the ethical committee of each nursing home, where the research was later conducted.

When recording audio tapes, it is difficult to assure the participants that they will remain anonymous and that the collected data will remain confidential,
especially if tapes are recorded for longer period of time. The issue is even more
delicate, especially in view of the confidential nature of the interview to protect
privacy. Privacy represents the protection of a person’s integrity and the protection
of an individual or family secret that may become known to the researchers during
the research process (Routasalo & Isola 1996). The approach ensuring anonymity
and privacy was to never display any names of the involved persons and private
issues not considered in research have been erased. Concerning the interview
recording, the participants were explained the nature of this study and given an
information sheet of the research process. The participants were informed that
participation in this study was voluntary. At the start of the interview, the
participants were asked for a permission to do the recording once more and they
were informed of the rights to stop and erase the recorded data by withdraw from
the study at any time.

Elderly people as participants of a qualitative study may need extra protection
owing to their vulnerability. The researcher has to respect the participants’
humanity and ensure their autonomy, and be sensitive to their expressions and
gestures in a reciprocal interaction throughout the research process (Jokinen et al.
2002). In that manner during the interviews no offending behaviour occurred
under any circumstances and participants were not forced to give statements about
issues they avoided or provided by vague answers (Teeri et al. 2006).

Concerning the questionnaire data, all the participants were informed about
the nature of the study (information was given orally to all the participants and in
writing together with questionnaire), and what participation would entail for them
(Puotiniemi & Kyngäs 2004). By returning the questionnaire, the participants gave
their consent for the data to be used for research purposes. Anonymity was
protected during the whole work, since no names were displayed and it is not
possible to determine exact persons carrying out questionnaires. Participation in
the study was voluntary.

The confidentiality of the data was taken into consideration at all phases of the
research; the original data (audiotapes, questionnaires), the transcribed data files
and the printouts of the research transcript were securely protected so that the
outsiders could not get access to them. The data were used only for the purposes of
this research, and only the researchers were allowed access to the original
collected material. The participants were given a promise that the data would not
be used for teaching purposes and no copies would be released without further
consent. Participants in study were offered a chance to review all the material
coming themselves as well as the interpretations made of it.
6 Results

Results are presented separately for qualitative and quantitative analysis. Chapter 6.1 describes results obtained by interviews and chapter 6.2 results of self-assessed survey. Proposals to achieve quality institutional elderly care in Slovenian nursing homes are summarized in chapter 6.3, by defining cross sections and core category between residents, relatives and nursing staff points of view.

6.1 Results of qualitative research

For each point of view separate results about quality of institutional elderly care and about elderly care offered were conducted. Results are presented in chapters from 6.1.1 to 6.1.7.

6.1.1 Quality of institutional elderly care from the residents point of view

Based on the empirical interviews data five subcategories of quality institutional elderly care from the residents’ point of view were developed and formulated: good physical care, homeliness, active life, caring, sufficient professional staff.

The first subcategory good physical care comprised tidiness, care of skin, massage and quality food. The residents described tidiness as desire being washed with water and soap or as getting opportunities to wash them alone, like they desire it. Traditional form of washing gave them a feeling of being tidy:

“I would like to be washed with more water.” ws13-4:20
“More attention and precision during washing.” ws57-1:40

Residents expressed that care of skin makes them feel good. Some residents were bedridden and they were afraid of bedsores. They also believed that dry skin needs careful care:

“Due to sensitive care of skin the staff healed my legs.” ws57-4:40
“I would like more care of skin, but you always have to ask and I don’t like to bother.” ws45-2:00

Some residents expressed a need for massage of back, legs and heels. The residents thought that nursing staff is obligatory to offer the massage at the end of daily hygiene. Especially immobile residents desired the massage:
"I am immobile and I need the massage, my heels are burning." ws54-1:20
"I need a massage because of rheumatism, but they don’t have time.” ws46-2:15

The residents wished to get served quality food and especially enough fruits. Some of them were unsatisfied with served food, because staff members were not interested what they like to eat:

"The food should contain less conservantes, I have a sensitive stomach.”
Ws30-4:40
"Sometimes I wish to get other meal, not to torture myself with served food.”
Ws10-0:45

The second subcategory homeliness was formulated by safety feelings and home-like feelings. Safety feelings represented for residents a possibility to call someone if they needed help. They prefer just to press button, if installed (respondents in majority had installed calling devices). Residents felt safe in nursing homes, because there were many people around them, they never felt to be completely alone:

"I wish that I would get help even at night, when I call for it.” Ws54-8:30
"I feel safer here, but I sometimes miss support when I am in motion.” Ws07-5:30

Residential life should care for residents’ home-like feelings too, in order to make them more satisfied. Some residents expressed deficiency of home-like feelings. Home-like feelings were also described by keeping favourite or familiar objects from back home:

"I have not everything that when I was at home. I wish to have more home-like feelings.” ws12-01:10
"I miss little more effort and help in distress, like it was at my home.” Ws10-1:43

The third subcategory active life was described by social activities, sociability and organisation of social events. Residents would like to take part in different activities at their ward that stimulate physical and mental health, like morning exercise, playing cards or party games. Residents described their desire for more activities by the following examples:
“I would like to participate in more activities during the long days, perhaps play cards.” Ws47-4:15
“It would be nice if morning exercise was better organised or in gym.” Ws25-4:10

Some residents have difficulties to come in touch with other residents due to new or unknown environment. Sociability was expressed as request for some help to domesticate themselves:

“I need help to better associate myself among people in nursing home.” ws12-8:00
“At this place there are many people, but I don’t know who would like my company.” ws25-3:05

The majority of residents in nursing homes expect to preserve their contact with outside world through organised social events, like Christmas, New year’s Eve, Carnival, Easter etc. They also expressed expectations for culture events like theatre, literature evenings and “parties”:

“I chose this nursing home because it is in the town centre and theatre is in vicinity.” ws12-14:40
“This was my first Christmas in nursing home, without my two sons because of their dispute, and it was different from that I was used too.” ws12-3:00

The next subcategory caring was made up of good communication, human emotional relationship, friendliness, help and enough time. Residents often evaluated the quality of caring through willingness of nursing staff to communicate with them. They desired to express their wishes, needs and also some criticism:

“I would like meetings with staff to exchange opinions, to praise or to complain.” ws25-3:50
“Staff shouldn’t show signs of nervousness when we communicate, they should listen more carefully.” ws12-10:30

Human emotional relationship is often noticed by behaviour or responses of nursing staff. Nursing staff should be careful expressing these signs and always have this in their mind when caring or accompanying elderly residents. Residents described this issue with the following examples:
“Warmth and to listen a little, when people are sad and embittered.” ws10-1:26
“People who care for the elderly need verification; they must be respectful and have patience.” ws12-10:15

Elderly people recognise friendliness in a manner that they don’t need to be afraid and imagine it as they were in alliance. The friendliness was described as:

“I wish decent and friendly relations, I don’t experience it always.” ws46-1:00
“I wish a friendly face and kind words, this kind of behaviour is most important to me.” ws28-2:20

Elderly people need help of staff members to solve their problems or fulfil their needs. Fulfilment of desired needs can lead to better or friendly relations and make residence in nursing homes more pleasant:

“I need help to go outside, but there is no one to drive my wheelchair.” Ws47-2:00
“I wish they would visit me in my room more often, and help me to the toilet.”
ws13-0:50

Residents of nursing homes wished that staff members would have more time available for them. As a consequence they felt uncomfortable because of too fast treatment. Wish for more time was mainly described in statements indirectly or in connection with other categories. Some concrete examples of more time issue were like this:

“Staff should work more slowly, it seems they always fight against time.”
ws10-4:20
“I would be grateful, if staff could take more time for me.”
ws07-4:40

The last subcategory sufficient professional staff presented combination of competences of head nurses and enough nursing staff. Due to progressive age residents require more care and have also more health problems and also problems in general. They expect of nursing staff to be of help in their problems or special needs, to have sufficient competences. This was expressed in the following ways:

“I wish my nurse would allow me to visit a doctor more often.”
ws25-1:40
“I expect of my nurse to be able to arrange some volunteer help for me.”
ws12-18:43
Residents of nursing homes noticed and were aware of the numerical inadequacy of nursing staff. In their description of quality institutional elderly care they often expressed the problem of low number of staff working on the ward. Most of them believed that enough staff members could offer better care and room visits could be longer:

“I would appreciate if there would be no waiting time.” ws11-4:25
“At least there should more discipline, better organisation of work, since there is no adequate number of staff.” ws30-3:34

The main category of quality institutional elderly care from residents point of view was selected as *attentive care* since residents in majority expressed that they only need more attention or caring, instead of thorough nursing care. Attention was described as friendliness, being provided with careful and slower treatment, by receiving adequate respect from staff members and in a manner of human emotional relationship to get help and company. Also, some social activities were asked for, to break monotony and to have some fun or joy. Nursing care should also comprise optional requests for skin care or massage. The main category “attentive care” and its subcategories are presented in Figure 3.

![Fig. 3. Quality of institutional elderly care from the residents’ point of view.](image-url)
6.1.2 Institutional elderly care offered from the residents’ point of view

Based on the empirical interviews data three subcategories of offered institutional elderly care from the residents point of view were developed and formulated: insufficiency of nursing staff, unprofessional communication and maltreatment.

The first subcategory **insufficiency of nursing staff** was described as lack of staff and hastiness. To assure quality of nursing care for all residents a sufficient number of nursing staff must be available. Most residents described that they notice or directly feel the effect of the lack of staff:

“You have to ask for everything, there is less and less staff.” ws13-5:50
“Here should be more staff, like it was when I moved in, some time ago.” ws11-7:11

Residents expressed importance to be treated with adequate attention and accuracy. If care is made too fast individual approach and autonomy are not guaranteed. Hastiness was described as:

“They only wash my face, my hands, everything else is negligent.” Ws13-3:30
“They are kind to me, but they are so often in a hurry.” Ws48-4:10

The next subcategory **unprofessional communication** comprised insufficient communication, unkind behaviour and unwillingness to listen. Residents wish to communicate, to express their problems and needs. Some staff members don’t like or want or are unwilling to communicate or they respond rudely. Insufficient communication was described in the following ways:

“I am not satisfied, because they don’t explain to me things properly.” ws11-5:36
“Quality of communication by staff differs too much.” Ws28-0:50

Staff members sometimes, because of demanding and responsible work, show unkind reactions. Residents were distracted by unkindness and they also felt uncomfortable. Dependent residents were especially distressed by unkind behaviour:

“They don’t find kind words for me in here.” Ws47-4:45
“If you are dependent, staff members often show bad mood.” Ws12-8:20
Staff members show signs of unwillingness to listen to residents when they perform daily care. They prefer to do their job without verbal disturbance, so they are able to finish on time. Residents described unwillingness to listen to them in the following ways:

“They do nursing care well, but they don’t consider my remarks or desires.” Ws49-2:50
“I am better silent, they don’t want to listen anyway, perhaps I am too tiresome.” Ws47-5:14

The third and last subcategory maltreatment comprised fast care, low protection of intimacy and fast feeding. Residents are treated inattentively when doing daily care and by this they were not feeling comfortable. In general they describe nursing care being too fast:

“I am washed in only five minutes sometimes even before that.” Ws13-4:12
“They treat me so fast, I am sometimes dressed being wet.” Ws57-3:10

Problem of intimacy is especially present to residents who share their accommodation with others. Residents in majority expressed that their intimacy is practically unprotected. This is a general problem in more-bedded dwellings in Slovenian nursing homes, because folding screens are not used:

“I feel especially bad when the door of my living room is left open.” Ws07-3:00
“It was most difficult to me when I got dependent in intimacy care and I had not enough money to move to single-bedded room.” Ws54-7:15

The amount of completely dependent residents is growing without any increase of the number of staff members and therefore it is difficult to feed dependent residents carefully and slowly. Some residents expressed that eating time is becoming a real torture:

“I must swallow so fast, I rather eat alone and smear myself.” Ws54-5:56
“I sometimes notice that my roommate is fed with too hot meals.” Ws47-5:52

The main category of offered institutional elderly care form residents’ point of view was described as neglect of care, as a consequence of fast, careless or sometimes even rough daily treatment and low protection of intimacy that residents experienced, because of shortage of staff members and hastiness due to
lack of time. Communications and conversation also came short of residents expectations. The residents were not only complaining, they just thought that offered care was in each instance a little behind of their expectations. The main category “neglect of care” and its subcategories are presented in Figure 4.

**Fig. 4. Institutional elderly care offered from the residents’ point of view.**

### 6.1.3 Quality of institutional elderly care from the relatives’ point of view

Based on the interviews data five subcategories for the quality of institutional elderly care from the relatives’ point of view were developed or formulated: human and individual approach, good physical care, comfortable and safe environment, social life and sufficient nursing staff.

The first subcategory *human and individual approach* was formulated out of good communication, human relationship, familiarity feelings, individual approach and humour. Staff members should pay enough attention to good communication with elderly residents to establish confidence and to make them feel well. Also, attention must be paid to nonverbal communication, such as kind looks, touch or just to give residents an impression that they are observed and won’t be left alone. Some relatives also expressed the need to be verbally involved in the care of their nearest. Good communication was described in the following ways:

“I would appreciate if staff members asked me what expectations I have.”

ws32-1:10
“I wish more personal contact, conversation, listening, presence, comfort, acknowledgments; communication is a very good medicine.” ws43-1:45

By entering nursing home residents must give up some of their traditional habits or needs. These changes usually restrict the ability to balance between the objectives and needs entering the dependent relationship. Relatives expect from staff members to have enough emotional intelligence to be able to offer human relationship and are in that manner adaptable to residents needs for better interpersonal cooperation. This need was described, for example, like this:

“Staff members should have very good observation skills.” ws52-5:31
“It is important to preserve human dignity, to give some acknowledgments to residents.” ws31-4:21

Relatives saw familiarity feeling as kind atmosphere, calmness and sense of warmth, circumstances that residents experienced at home. Relatives expect of staff members to stimulate or help residents to carry on with their lives although their health condition might worsen. Relatives would like if staff members could treat residents as they were own family members:

“I would appreciate if my mother had company more often and would not be lonely.” ws52-1:50
“I would like relations mother had back home, as long as we were able to look after her.” ws33-0:40

Individual approach should assure best solutions according to residents’ needs and wishes, it should stimulate self-care, recreation, hobbies and social activities. Relatives expressed individual approach by:

“People who have difficulties to accommodate should be attracted to join the company.” ws43-5:10
“Approach should be like in restaurant, as you were the only guest.” ws34-6:55

Good mood, humour, laughter is an important part of each stage of human life. Humour in a form of pleasant social activities can help residents to relax and sometimes even to forget their pains. Such occasions also give relatives the opportunity to get to know each other better. Relatives described humour in following ways:
“They could invite inexpensive amateur comedians to provide some fun and laughter among residents” ws23-3:14
“Less drugs, laughter is stronger than morphine.” ws43-2:30

The second subcategory good physical care was experienced as personal hygiene, quality food and getting medicine at prescribed time. Help with personal hygiene is usually the most important reason to move to nursing home. In that manner relatives expressed this issue of having much more importance than did residents themselves. Nevertheless well performed personal hygiene returns self-confidence and good feeling:

“I am glad if my dad feels clean and looks tidy.” ws32-0:50
“Staff should care as circumstances require and not by plan.” ws20-1:35

Quality food was one the main issues of quality institutional elderly care expressed by relatives. Relatives were unsatisfied with served food and suggested that nursing homes should also consider contemporary nutrition trends. They also expressed the need of enough liquids at hand and proper feeding of handicapped residents, since their perception was that they are fed in an inappropriate way or too fast:

“Half portion of quality food is better than entire portion of no use.” ws34-8:40
“I wish my husband is well fed and that he receives enough liquids.” ws06-0:20

Relatives expect that residents will get medicine on time and exactly like prescribed, for example before, between or after the meal. This issue is proved to be very sensitive since back home relatives had problems to animate or to look after elderly, if they handle with medicine in careful way:

“I understand quality as safe environment, proper care and to get medicine at prescribed times” ws21-0:30
“Staff members should pay attention that medicine has been really taken, back home we sometimes found pills below the pillow or in bed.” ws20-3:49

The third subcategory comfortable and safe environment comprised clean environment, comfortable furniture and physical safety. Relatives were much more concerned about clean environment than elderly residents. In their opinion this should be one of the priorities for nursing home supervisors:
“I enjoy visits when I see that rooms are clean and courtyard is in fine shape.”
ws38-3:41
“Good looking environment always inspire people with positive feelings.”
ws34-5:35
Suitable arrangements and comfortable furniture makes residence pleasant to live in, offers adequate security and self-confidence by moving around the living room and bathroom. Relatives described the issue as a concern for injuries and problem of tasteless furnished apartments:

“I expect that apartments in nursing homes offer more comfort, I would hate living in such a room.” ws21-1:55
“More-bedded apartments should be rearranged to maximum two beds and also some furniture should be thrown to garbage” ws22-2:45

Relatives by themselves or in conjunction with their elderly decide to move to nursing home because of physical safety. Home environment sometimes because of architectonic barriers such as stairs, and risk of injuries alleviate removal to a nursing home. Relatives said that institutional custody should ensure or offer better security that this is possible at home:

“Mother had to move to custody, because we could not look after her day and night.” ws22-3:34
“I wish safety could be guaranteed, my mother was injured by another resident suffering from dementia.” ws36-5:45

The fourth subcategory social life combined organisation of social events and social activities. Older population entering institutional custody today is, in general, better educated and also better versed; some of them, for example are able to use the computer. Therefore, residents and also relatives have higher demands about different events or even education programmes, for example for longer independent life, generations’ meetings or for joining groups for self-help. Relatives described this issue, for example, like this:

“My mother wish to remain a member of self-help group even as nursing home resident.” ws38-5:11
“Our neighbour was delighted about generations’ camp, organised by nursing home from Maribor” ws56-4:11
Relatives expect staff members to try organizing plenty activities to improve quality of life in institutional custody, such as morning exercises, cooking gatherings or other activities that would attract many residents. Relatives would also like to see that poorly mobile or immobile residents are included in these activities:

“My mother likes to exercise, although she can’t make all the moves she is hanging on.” ws20-4:47
“I was very pleased when a doughnut baked by residents was offered to me, later my mother told me she took part.” ws38-5:23

The last subcategory sufficient nursing staff was seen as no waiting time, enough nursing staff and professional staff. All Slovenian nursing homes have low numbers of staff members and, in addition, low average education (according to background data only 10% of staff are registered nurses). From the relatives’ point of view, especially inconvenient prove to be situations, where residents have to wait for escort to the toilet, diaper change or for help to eat meals:

“Quality care is to receive help when you need it, without unnecessary waiting.” ws36-0:40
“Rapid escorts to the toilet for dependent residents and accurate change of wet diapers.” ws32-4:47

The majority of relatives know the staff regulations that are set for the nursing care of elderly people. In that manner they are worried about the ability of staff to offer quality custody in general. Additional problem to necessity of adequate nursing staff were also some incidents already described in other categories, which perhaps could be avoided, if enough nursing staff were present:

“Legislation must increase numerical adequacy of staff members per resident, like it is now you really have to be fast to treat all.” ws33-1:52
“In my opinion it is impossible or inconvenient to feed ten residents on the ward in one hour.” ws52-3:00

Relatives also expressed that if, in the future, staff norms are to remain unchanged, at least more educated or by their words professional staff should be employed. Residents believed that higher educated staff could offer better care, better communication and more polite relationship:
“I expect professional and tactful communication without any offensive remarks.” ws56-3:20
“Only professional staff should work with elderly, to save costs they are hiring unemployed people by public works.” ws34-7:35
“To work with elderly people you must be highly professional and have a heart in the right place.” ws52-8:22

The main category of quality institutional elderly care from relatives point of view was described as **optimal custody**, since relatives saw quality of institutional elderly care as institutional custody applied with good personal hygiene, quality food and safe medication. Relatives also expected individual approach by sufficient nursing staff, organising desired social or meaningful activities or events in comfortable and physically safe environment. The main category “optimal custody” with all five subcategories is presented in Figure 5.

**Fig. 5. Quality of institutional elderly care from the relatives’ point of view.**

**6.1.4 Institutional elderly care offered from the relatives’ point of view**

To describe quality of institutional elderly care offered in the nursing homes from the relatives’ point of view, three subcategories were formulated: insufficiency of nursing staff, neglect of care and uncomfortable environment.

The first subcategory **insufficiency of nursing staff** comprised low-educated staff, unmotivated staff, routine work and bad documentation. Relatives believe that due to advanced age of residents staff members should have more expertise or
education to treat such a demanding population. This issue was described, for example, like this:

“I think staff should watch carefully over dementia patient, they must recognise if they may get a risk for others.” ws36-6:10

“As far as I am concerned you get education by school and not by seminars, this is how they justify lower education.” ws34-1:48

Unsuitable staff regulations connected with physical and psychical fatigue, low salaries, often lead to unmotivated attending to one’s duties. Caregivers suffer under these conditions which is reflected in their behaviour or showing their reluctance to residents. Some relatives experienced unmotivated behaviour, for example, like this:

“I myself must check if my mother is eating meals.” ws34-10:30

“Staff members should administer medicaments more responsibly and check if residents have really taken them.” ws23-1:20

According to relatives treatment is becoming very much a routine, without any emotions and willingness to communicate. Staff should also, by giving directions or orientations, help residents with accommodation in nursing homes. This issue was not described very directly, but relatives felt that staff members should sometimes check how residents manage or organise their life in nursing homes:

“Treatment is becoming a routine work, without conversation and staff does not motivate the residents for self-care” ws56-2:00

“Staff should pay more attention to how residents accommodate themselves, give some advice or directions how to make things for themselves easier.” ws38-2:00

Some relatives stated that they were not satisfied with documentation policy about health condition of residents. Nursing documentation in nursing homes does not meet hospital standards yet. This is also due to low-educated staff documenting only essential activities or health changes of residents:

“Because of dyspeptics of the elderly staff should frequently check if residents have gone to the toilet, to detect possible health risk soon enough” ws33-5:40

“I noticed some bruises on my mothers skin, then I found out that she felt from her bed, but although it was a small incident it was not documented” ws20-4:12
The second subcategory neglect of care comprised insufficient hygiene, lack of physical activities, fast feeding and devaluation of human dignity. Relatives in majority were satisfied with basic care, they had complains about frequency or duration of treatments. Insufficient hygiene was described in some specific issues:

“I miss mouth hygiene, I sometimes smell mothers’ breath.” ws52-9:00
“My mother is suffering from confusion, she is often smeared from breakfast or lunch, staff should also pay attention to clean clothing.” ws22-2:58

Relatives expressed importance of physical activities in advanced age to somehow remain in good physical condition or just to be in courtyard enjoying fresh air. Immobile residents have the problem that someone must be available to accompany them. Relatives stated that daily promenades could be used to take some exercise. Lack of physical activities was described, for example, like this:

“Elderly do come out on fresh air, but just remain sitting for a while.” ws34-5:10
“Residents without relatives or friends are, in general, closed between walls.” ws34-6:00

Some relatives had already experienced some unpleasant incidents regarding feeding, because residents were almost choked. Another problem residents expressed was that they found their elderly in hunger, since residents were unable to eat enough food in the short time they had at disposal. According to their opinion this problem also results from poor nutrition quality:

“My husband was almost choked many times, I feed him regularly by myself, I think without me he would not have survived 13 years in here.” ws06-6:40
“It is ridiculous, diet must be extra paid and portions are far too big to swallow in short time” ws32-7:50

Relatives expressed that staff members should be obligated not to devaluate residents’ human dignity. Residents are often exposed to various forms of harassment, humiliation or to violation of intimacy. Relatives expressed this issue in the following ways:

“I was very pleased when I saw a notice on the living room door, not to disturb due to intimacy care. Unfortunately, staff do not use it always.” ws36-7:40
“When I once came for visit I saw a caregiver with a resident on a wheelchair leaving the bathroom, unclothed, covered only with a sheet.” ws34-9:11
The third subcategory *uncomfortable environment* was experienced as uncomfortable dwelling and deficient cleaning. Apartments and surroundings of nursing homes should be organised or arranged more comfortably by use of ergonomic findings, by adequate furniture and modern cooling and heating systems. Relatives expressed the issue, for example, like this:

“In the living room there are three beds and you cannot move around, there is no table, food is served in dining room” ws38-4:35

“Bathrooms are not adequately equipped with movable bath tubs, showers have no handles to hold yourself.” ws22-4:11

Some relatives were not completely satisfied with cleanliness of apartments. Usually, cleaning services are hired to clean apartments and the supervisor of the nursing home must remind contractors to perform better cleaning. The problem is mainly financial, since more frequent cleaning is more expensive:

“Apartments are not cleaned frequently, although the conditions are similar to those in hospital.” ws22-3:58

“When we come for a visit, we sometimes notice stains and dust on the floor.” ws52-9:21

Relatives expressed dissatisfaction with institutional elderly care offered in nursing homes, they noticed many deficiencies and therefore the main category of institutional elderly care offered was described as *deficient care*. According to their description the present dwelling environment, being uncomfortable, often results in various kinds of devaluation of human dignity. Relatives acknowledged insufficiency of nursing staff, who are forced to perform routine care to keep up with relentless pace. The main category called “deficient care” and all subcategories are presented in figure 6.
6.1.5 Quality of institutional elderly care from the nursing staff point of view

Quality of institutional elderly care from nursing staff point of view comprised four subcategories: individual approach, working conditions, satisfying needs and physical needs.

The first subcategory, individual approach, was formulated as good communication, high-educated staff, intimacy environment and homeliness. Good communication presents a process to meet individual approach. To establish good communication to residents, nursing staff must have knowledge of various communication techniques. Also staff members should seek communication with relatives:

“Work with the elderly is very specific, you need sensibility and warmth, expressed in nonverbal manner, virtues difficult to learn.” ws35-2:10

“Residents should be explained the treatment, nursing interventions, received nutrition, to tell them about things as much as possible.” ws44-2:30

Slovenian nursing homes are enforced to accept seriously ill residents in advanced age, often by transfers directly from hospitals. To continue offering hospital care nursing staff must be adequately educated. Staff members, by treating this people, acknowledge by themselves the need for higher education. The need for higher
education that represents a basis for individual approach was argued by the following examples:

“Caregivers must be additionally educated to cope with residents in advanced age and serious illnesses.” ws15-5:20
“Due to advanced age and serious conditions of residents, better staff regulations and higher education are needed” ws16-1:00

Staff expressed intimacy environment as important part of quality. They recognise significance of intimacy care, but have problems to offer this because of unsuitable physical environment. Staff members described this issue, for example, like this:

“There is an urgent need for better accommodation possibilities, with more space and with single or double beds only, to provide quality intimacy care.”
ws58-2:20
“Staff regulations for the elderly are sad, legislation should do more to retain their dignity.”
ws50-5:55
“Nursing care must be thorough and safe, with intimacy protected.”
ws17-2:00

Moving to a nursing home is like moving to a new home, for residents usually a final destination in their life. An important role of staff members is to provide residence like it was back home. Homeliness provides residents with welcome feelings, conjunction with new environment and other people living in the nursing home. Staff members described feelings of homeliness, for example, like this:

“We should adjust to residents and consider their habits.”
ws24-1:25
“Kind words, humour, telling jokes, something to relax, as you were talking to your own family.”
ws50-3:50

The second subcategory working conditions was seen by more nursing staff and good organisation of work. Most staff members expressed the need for a sufficient number of staff. Unsuitable present staff regulations reflect in too many residents or too many responsibilities for one nurse. According to staff, the only way, to perform nursing interventions by contemporary standards is to employ more staff:

“For quality care we need more staff, sadly this is regulated by legislation, we can’t do much about it”
ws16-2:00
“There should be an adequate number of staff and therefore no need to hurry, each resident should receive more attention.”
ws44-0:50
Good organisation of work enables harmonised team work, better control of performed activities and reduces the danger of early burn-out symptoms. According to staff, their satisfaction with working conditions reflects in the way how they treat the residents.

“If organisation of work is rational in majority present regulation of staff suffice.” ws53-2:00

“Time and good organisation are needed to stimulate residents for self-care to preserve their identity.” ws50-10:30

The third subcategory satisfying needs comprised residents’ satisfaction and empathy. Quality of residence in nursing home and consequently the quality of life reflects in the residents’ satisfaction. Satisfaction was expressed as feelings of happiness and secure custody. Additionally, some staff members said that residents express most satisfaction if treatment is done in a way they like or desire. Residents were also satisfied if attention was paid to their suggestions:

“Quality care is if you experience residents’ satisfaction either visual or verbal.” ws27-0:30

“To satisfy residents’ needs we should offer things they want and not work by procedure.” ws35-4:10

“To fulfil their wishes, make them happy, to satisfy them by natural approach, although it might not be a professional one.” ws39-0:50

Empathy is an ability or skill to obtain one’s feelings or read their minds. Staff members expressed empathy as a virtue difficult to learn, but at least each employee of the nursing home should make efforts to improve this skill. Residents are often in situations when they are unable to tell what they need or which health problems they have. Staff members in connection with empathy described skills of foreseeing, anticipating and making decisions on time:

“Residents unable to express themselves well enough must be observed and their needs perceived.” ws50-0:15

“By my experiences, to satisfy residents empathy is needed more than education.” ws15-6:40

“Staff members should be able to recognise problems before they emerge.” ws24-4:40

The fourth subcategory physical needs combined stimulated autonomy and quality of nursing care. Good treatment of physical needs includes stimulated autonomy.
Staff expressed that they feel obligated to stimulate residents’ autonomy to motivate them for self-care and in that manner give chances to preserve their physical capabilities:

“Residents must be stimulated or shown that they are still capable and are not written off.” ws50-11:10
“We should find some ways to occupy capable residents, to stimulate and praise them.” ws18-2:40

Quality of nursing care results in satisfying basic physical and psychosocial needs. The majority of staff expressed that good nursing care should include suitable treatment, nursing interventions and appropriate food applied by psychosocial needs. Quality of nursing care issues were argued as follows:

“To offer morning and evening care, showers, skin care, without signs of hurry.” ws26-2:45
“Good nursing care can be achieved by competent staff, life-long learning and prevention of routinely performed work.” ws53-0:40

Quality of institutional elderly care from the nursing staffs’ point of view was described in a more professional way. Their description comprised a broader view of nursing care, treatments and interventions to satisfy residents’ needs. Staff members stated many ground definitions of quality nursing care and problems they face due to staff shortage. All comprised subcategories were presented by the main category called holistic approach, since nursing staff saw this as a goal to meet quality. Staff members avoided statements about social activities, probably due to additional responsibilities for them and increased danger of injuries to residents. The main category “holistic approach” and all subcategories are presented by figure 7.
6.1.6 Institutional elderly care offered from the nursing staff point of view

From the interviews about offered care three subcategories from nursing staffs’ point of view were formulated: nursing staff regulation, inadequate administration and time shortage.

The first subcategory nursing staff regulation comprised issues like not enough staff and unmotivated staff. Staff members expressed that they feel discriminated by legislation with current staff regulations being unable to offer quality care as they understand it. Because of staff shortage they are forced to work faster, suffer from physical and mental fatigue, experience signs of stress and must hide low spirits to stay convenient to residents:

“Staff would like to offer more, but it is difficult, since time regulations are narrow.” ws24-3:10

“We have shortage of staff, therefore less time, are physical and mental exhausted, sometimes we even forget things.” ws26-3:30

Staff members, especially those with lower education showed low motivation because of physical and mental fatigue. Some staff member also pointed out that at present time, situation of caring for elderly people is not very favourable and, in general, nursing staff is trying to avoid this occupation. In situations where the
employer is unable to raise salaries or change staff regulations, it is difficult to raise working motivation or spirits:

“Motivation of caregivers is in decline, and recently, less able students decide for this occupation, as far as I remember it was not always like this.” ws16-2:30

“Motivation is low because staff regulations are inadequate, incomparable to our hospitals or foreign countries.” ws35-6:00

The second subcategory **inadequate administration** was formulated by unsuitable organisation of work and deficient documentation. Staff members expressed that due to lack of regular staff, organisation of work must be reorganised on daily basis and therefore be very flexible. Each institution has its own strategy how to cope with tense circumstances that sometimes occur because of staff shortage:

“We are trying to reduce time distress by employing assistants by public works, of course they are not allowed to perform nursing interventions.” ws24-4:25

“We have bad possibilities for choosing new staff since all prove themselves at the beginning, problems emerge later.” ws53-4:00

Nursing documentation in nursing homes is usually not completed to the extent of that in hospitals. Staff members expressed problems or resistance to detailed nursing documentation, since they already work behind time and this would only worsen their situation. Obligatory nursing documentation comprises continuity for nursing team, documentation for the supervisor, optional documentation of incidents and legal protocols:

“I am already late with my work because of staff regulations, there is no time for detailed documentation, therefore I only document obligatory issues to meet possible controls.” ws39-5:55

“For accurate documentation we need computers and software, paperwork takes too much valuable time.” ws27-6:51

The third subcategory **time shortage** was experienced as hastiness, neglect of care, insufficient communication and devaluation of human dignity. To cope with inadequate staff regulations, staff members must perform nursing interventions quickly and without many interruptions. Staff complained about nursing intervention being timed, since such relations cannot be of interest to people:
“Nursing care is on a high level, but there is nothing personal about it, only hastiness.” ws50-4:30
“We are missing time to be able to fulfil additional requests of residents.”
ws50-4:50
“We have to keep up with the pace, everything is timed, I think nursing care does not deserve such norms” ws27-5:25

The majority of staff members expressed that they have difficulties to keep up with pace necessary to treat all residents in the prescribed time. To meet the norms they are forced to make some adjustments that can be in worst case be interpreted as neglect of care. Staff revealed that, if possible, they usually return later and make up for missed nursing interventions:

“Because of time shortage we take away the residents ability to self-care.”
ws50-2:40
“We try hard not to say no, if we are behind time we return later.” ws42-4:45
“Nursing interventions are being simplified and traverse to routine work.”
ws53-2:40

Since staff members are always in a hurry they expressed that they are shortening communication with residents to a minimum. Additionally, staff members need some skills or knowledge how to communicate to obtain needed information in a fast and accurate way. Staff members described unskilled communication in the following ways:

“We need more communication skills, to separate common gerontological problems from disease.” ws27-6:08
“Staff members starting their careers in gerontological care, have difficulties that also reflect in poor communication, I think they should obtain experiences elsewhere.” ws53-4:40

People entering nursing homes usually have decreased independency which negatively influences their human dignity. Losing abilities to satisfy their basic physiological and sociological needs additionally decrease their dignity. Staff members expressed that interrupting conversations and pretending interest due to lack of time is very impolite and devaluates residents’ human dignity:

“We don’t know how to listen to residents, we usually pretend interest and hide nervousness with adequate mimic.” ws51-1:45
“We don’t have time to listen to residents and are interrupting conversations.”

Nursing staff were in most cases convinced that nursing care offered was of good quality. Problems were represented by hastiness as a consequence of inadequate staff regulations. For each resident or performed nursing intervention, the available time is being prescribed and high composure is needed not to get behind schedule. In that manner nursing care with less communication or conversation and no human touch resulted in routine care presented as main category of institutional elderly care offered from the nursing staffs’ point of view. Staff members acknowledged that lack of psychosocial care cannot meet quality institutional elderly care although they were obligated to primarily concentrate on physical needs. The main category “routine care” and subcategories are shown in Figure 8.

![Fig. 8. Institutional elderly care offered from the nursing staff point of view.](image)

### 6.2 Results of quantitative research

Five instruments measuring different aspects of nursing care have been separately statistically analysed and results are being presented in chapters from 6.2.1 to 6.2.5, respectively.

#### 6.2.1 Willingness of nursing staff to meet the residents’ needs

After brief review of results by percentage distributions the obvious differences between physical (eating, dressing, toileting, moving etc.), psychological (safety,
peace etc) and social (personal touch, conversation, sexuality etc.) needs was noticed. Therefore, the 14 items of the instrument were separated into two groups or subcategories (physical care and psychosocial care) as shown in table 5. Items of each subcategory were calculated into sum variables. On the scale from 1 to 5, the mean value of 4.4 (SD 0.5) shows that the staff was best in meeting physical care needs of the elderly person. The mean value of psychosocial needs was 3.9 (SD 0.4) and the difference (lower value) to physical needs assessment was statistically significant (p<0.001). A strong positive correlation factor between physical and psychosocial care (r=0.65; p<0.001) was calculated. Also, staff that managed physical needs well also managed psychosocial needs better. On the other hand comparison of mean values resulted without any significant differences by education or ward. Correlation by nursing experiences did not show any significance too.

Table 5. Nursing staff’s assessments of assistance or ability to meet elderly residents' individual needs (N=148).

<table>
<thead>
<tr>
<th>Needs</th>
<th>Mean ± standard deviation ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical care items</td>
<td></td>
</tr>
<tr>
<td>Help at drinking and eating</td>
<td>4.8 ± 0.5</td>
</tr>
<tr>
<td>Cooperate to accompany the elderly to the toilet</td>
<td>4.5 ± 0.7</td>
</tr>
<tr>
<td>Accompany the elderly having troubles with moving</td>
<td>4.3 ± 0.8</td>
</tr>
<tr>
<td>Maintenance of suitable temperature and moisture in the room</td>
<td>3.9 ± 0.9</td>
</tr>
<tr>
<td>2. Psychosocial care items</td>
<td></td>
</tr>
<tr>
<td>The elderly having adequate feeling of safety</td>
<td>4.5 ± 0.6</td>
</tr>
<tr>
<td>Respond to the elderly person’s call</td>
<td>4.5 ± 0.6</td>
</tr>
<tr>
<td>Give possibility of self-care</td>
<td>4.1 ± 0.8</td>
</tr>
<tr>
<td>Time for listening</td>
<td>3.3 ± 0.9</td>
</tr>
<tr>
<td>Realization of tranquillizing touch</td>
<td>4.1 ± 0.8</td>
</tr>
<tr>
<td>Expression of thoughts, experiences and emotions</td>
<td>4.1 ± 0.7</td>
</tr>
<tr>
<td>Allow hygiene and dressing with your presence</td>
<td>3.8 ± 1.0</td>
</tr>
<tr>
<td>Establish peace before going to sleep</td>
<td>4.1 ± 1.0</td>
</tr>
<tr>
<td>Expression of sexual needs</td>
<td>1.7 ± 1.1</td>
</tr>
<tr>
<td>Contacts with relatives and friends</td>
<td>4.8 ± 0.5</td>
</tr>
</tbody>
</table>

Percentage distribution shows that staff were primarily available to help residents with eating and drinking (79.7% responded with always), accompanying resident to the toilet (64.9% responded with always) and residents could in 88.5% always contact their relatives. Most problematic items were meeting sexual needs, where
only 4.8% of staff responded with always, getting time to listen to residents (11.5% responded with always) and allowing the resident to do their hygiene, where 28.4% of responses were always. The needs assessments by mean values are presented in table 5.

6.2.2 Adequacy of nursing staff knowledge and skills to meet the residents’ needs

To calculate the difference between physical and psychosocial care, 14 items assessing knowledge of nursing staff were separated into two groups or subcategories (table 6). Items of each subcategory were calculated into sum variables. On the scale from 1 to 4 the mean value of physical care knowledge was 3.8 (SD 0.2) and the mean value for psychosocial care knowledge was 3.4 (SD 0.5). The difference was again statistically significant (p<0.001). Similarly to meeting the elderly person’s needs assessment, a strong positive correlation factor between physical and psychosocial care knowledge (r=0.64; p<0.001) was calculated. Those among the staff who expressed enough physical care knowledge also expressed better psychosocial care knowledge.
Table 6. Nursing staff’s assessments on adequacy of their knowledge and skills to meet individual needs (N=148).

<table>
<thead>
<tr>
<th>Needs</th>
<th>Mean ± standard deviation ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical care items</td>
<td></td>
</tr>
<tr>
<td>Offer safe nursing</td>
<td>3.8±0.3</td>
</tr>
<tr>
<td>Give food and drink</td>
<td>3.9±0.3</td>
</tr>
<tr>
<td>Give independent hygiene and dressing</td>
<td>4.0±0.1</td>
</tr>
<tr>
<td>Help by respiratory troubles</td>
<td>3.5±0.6</td>
</tr>
<tr>
<td>Help in connection with elimination and (excrementation)</td>
<td>3.9±0.4</td>
</tr>
<tr>
<td>Help individual resident in moving</td>
<td>3.6±0.5</td>
</tr>
<tr>
<td>Help by troubles with resting and sleeping</td>
<td>3.6±0.5</td>
</tr>
<tr>
<td>Appropriate dress in order to keep normal body temperature</td>
<td>4.0±0.2</td>
</tr>
<tr>
<td>2. Psychosocial care items</td>
<td></td>
</tr>
<tr>
<td>Communicate with the relatives and friends</td>
<td>3.6±0.6</td>
</tr>
<tr>
<td>Help express sexual needs</td>
<td>2.7±1.1</td>
</tr>
<tr>
<td>Recognise of the expression of pain</td>
<td>3.4±0.6</td>
</tr>
<tr>
<td>Help or advice in solving more difficult problems</td>
<td>3.3±0.6</td>
</tr>
<tr>
<td>Work with the resident in terminal phase</td>
<td>3.4±0.7</td>
</tr>
<tr>
<td>Confront with the death of the residents</td>
<td>3.7±0.6</td>
</tr>
</tbody>
</table>

Comparisons of mean values were made, without any significant differences by ward, but there was low significance as higher educated staff expressed more knowledge in psychosocial care (p=0.040). Also, a week correlation factor between staffs’ nursing experiences and psychosocial care knowledge was calculated (r=0.2, p=0.017). This was merely a confirmation of previous results, because higher-educated staff had also more nursing experiences (table 7). ANOVA test resulted in statistically significant difference between education groups and nursing experiences (p<0.001). Table 7 shows that registered nurses had on average 6 years of additional experiences to nursing assistants and 10 years to caregivers.
Table 7. Nursing experience in years by education groups.

<table>
<thead>
<tr>
<th>Education group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>caregiver</td>
<td>62</td>
<td>10.6</td>
<td>7.8</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>nursing assistant</td>
<td>72</td>
<td>14.4</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>registered nurse</td>
<td>14</td>
<td>20.4</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>148</td>
<td>13.4</td>
<td>9.0</td>
<td></td>
</tr>
</tbody>
</table>

The percentage distribution of individual items of the instrument shows best results in knowledge to give the resident independent hygiene and dressing where 99.3% of respondents expressed enough knowledge, followed by the ability to dress the resident appropriately in order to keep his/her normal body temperature (95.2% responded with enough). The third best respondents assessed the help with connection to excrementation (88.4% responded with enough knowledge). On the negative side, there were three items where enough knowledge was responded below 50%. Those items were: expression of sexual needs (28.7%), giving advice to solve personal problems (36.4%) and recognition of pain (47.3%). The assessments of knowledge and skills by mean values are presented in table 6.

The assessments show that nursing staff mostly considered they had enough knowledge to fulfil residents’ needs, but again there was a significant difference between physical and psychosocial care. In general, the staff believed they had enough knowledge, with exception of three items (sexual needs, recognition of pain and giving advices to residents’ personal problems) where the most frequent answer was that they did not have enough knowledge. The most problematic physical care item was helping elderly person with respiratory problems where only 54.8% of respondents expressed enough knowledge.

6.2.3 Staff’s view of the importance of the need to meet residents’ needs

Similarly to the assessment of staffs’ knowledge and skills, importance of those items was also separated to physical and psychosocial care (table 8). On the scale from 1 to 4 the mean value for physical care items importance was 3.9 (SD 0.2), and for psychosocial care 3.6 (SD 0.4). Comparison between two groups again showed statistically significant difference (p<0.001). Again, a strong positive correlation factor between physical and psychosocial importance of items in the field of nursing (r=0.53; p<0.001) was calculated. Staff members who found
knowledge and skills of physical care items important also expressed more importance of psychosocial care items. Comparison of mean values resulted in no significant differences by education or ward. Correlation by nursing experiences did not show any significance too.

Table 8. Nursing staff’s assessments of the importance of the individual needs (N=148).

<table>
<thead>
<tr>
<th>Needs</th>
<th>Mean ± standard deviation ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical care items</td>
<td></td>
</tr>
<tr>
<td>Offer safe nursing</td>
<td>3.9±0.3</td>
</tr>
<tr>
<td>Give food and drink</td>
<td>4.0±0.2</td>
</tr>
<tr>
<td>Give independent hygiene and dressing</td>
<td>3.9±0.4</td>
</tr>
<tr>
<td>Help with respiratory troubles</td>
<td>3.9±0.3</td>
</tr>
<tr>
<td>Help in connection with elimination and excrementation</td>
<td>3.9±0.2</td>
</tr>
<tr>
<td>Help individual resident in moving</td>
<td>3.7±0.5</td>
</tr>
<tr>
<td>Help with troubles with resting and sleeping</td>
<td>3.8±0.5</td>
</tr>
<tr>
<td>Appropriate dress in order to keep normal body temperature</td>
<td>3.8±0.4</td>
</tr>
<tr>
<td>2. Psychosocial care items</td>
<td></td>
</tr>
<tr>
<td>Communicate with the relatives and friends</td>
<td>3.8±0.4</td>
</tr>
<tr>
<td>Help express sexual needs</td>
<td>2.7±1.1</td>
</tr>
<tr>
<td>Recognise the expression of pain</td>
<td>3.9±0.3</td>
</tr>
<tr>
<td>Help or advice in solving more difficult problems</td>
<td>3.6±0.6</td>
</tr>
<tr>
<td>Work with the resident in terminal phase</td>
<td>3.8±0.5</td>
</tr>
<tr>
<td>Confront with the death of the residents</td>
<td>3.9±0.4</td>
</tr>
</tbody>
</table>

Knowledge and skills of 14 assessed items were by most staff members considered very or fairly important. According to the staff members opinion adequate knowledge and skills were most important when giving respiratory help or helping residents with eating and drinking (both items had 95.2% responses with very important). The only “negative” exception was sexual needs expression where only 60% found the item of considerable importance. The assessment of the importance of the individual needs by mean values is presented in table 8.

6.2.4 Maltreatment of residents observed by nursing staff

The respondents noticed inappropriate behaviour towards elderly residents on daily basis, the average being 5.2% (range by items 0.0–16.6%). Physical maltreatment (especially rough handling) was not recognized on daily basis. In general the response “never” varied from 12.4% to 66.4%, on average 36.0%.
Quite a significant part represented the response “I can’t say”, the average being 18.7%.

According to nursing staffs’ reports the most problematic issue was their work overload, so they were not able to accompany the residents outside (16.6% replies on daily basis). In the second place came the problem of untidy dwelling place (12.5% recognised it on daily basis). The next two cases of maltreatment represented violation of intimacy (10.3% on daily basis) followed by violation of privacy (9.6% on daily basis). The last problematic issue, with 8.8% of recognition on daily basis, was that the residents were not appropriately fed. The detailed assessments of maltreatment are shown in table 9.

Cross-tabulations did not result in any statistically significant differences between wards. There were some statistically significant differences between education groups, because registered nurses were more precise and avoided response option “I can’t say”. This situation occurred twelve times, and was especially significant in violation of intimacy (p<0.000), neglect of wishes (p=0.001) and when residents where inappropriate or deficiently dressed (p=0.004). In all three occasions graduated nurses never responded with “I can’t say”, compared to more than 15% of responses by caregivers and nursing assistants.

6.2.5 Well-being of nursing staff members involved in institutional elderly care

The main problem nursing homes nursing staff expressed was that having too many responsibilities (31.5% experienced them on daily basis) leaves them physically tired (more than 75% on daily or weekly basis). While there was no adequate number of nursing staff to do the job (more than 70% on daily or weekly basis) they were also mentally exhausted (more than 55% experienced the fatigue on daily or weekly basis).

Relationship between staff members was good as more than 60% responded that tensions occur seldom or never, the respondents were also able to rely on their colleagues when they got into troubles (58.3% on daily basis). Also, more than 70% responded they experienced real understanding and could ask for help from superiors on daily or weekly basis. The detailed assessments of staff well-being are presented in table 10.
Table 9. Nursing staff’s assessments of the maltreatment of elderly residents (N=148).

<table>
<thead>
<tr>
<th>Maltreatment</th>
<th>Daily</th>
<th>Once a week</th>
<th>At least once a month</th>
<th>Seldom</th>
<th>Never</th>
<th>I can’t say</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>1. Negligence in care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The elderly is left alone (without necessary control)</td>
<td>10</td>
<td>6.8</td>
<td>4</td>
<td>2.7</td>
<td>0</td>
<td>0.0</td>
<td>41</td>
</tr>
<tr>
<td>The elderly is not given the help, for which he/she has asked</td>
<td>2</td>
<td>1.4</td>
<td>3</td>
<td>2.0</td>
<td>2</td>
<td>1.4</td>
<td>33</td>
</tr>
<tr>
<td>Keeping in wet pads unnecessarily long</td>
<td>10</td>
<td>6.8</td>
<td>6</td>
<td>4.1</td>
<td>1</td>
<td>0.7</td>
<td>62</td>
</tr>
<tr>
<td>Inappropriate hygiene</td>
<td>2</td>
<td>1.4</td>
<td>6</td>
<td>4.1</td>
<td>0</td>
<td>0.0</td>
<td>36</td>
</tr>
<tr>
<td>Not enough quantity to drink</td>
<td>4</td>
<td>2.7</td>
<td>5</td>
<td>3.4</td>
<td>0</td>
<td>0.0</td>
<td>52</td>
</tr>
<tr>
<td>Inappropriate or deficient dressing</td>
<td>0</td>
<td>0.0</td>
<td>4</td>
<td>2.7</td>
<td>3</td>
<td>2.0</td>
<td>50</td>
</tr>
<tr>
<td>Not enough quantity of food (too much or too little)</td>
<td>4</td>
<td>2.7</td>
<td>3</td>
<td>2.0</td>
<td>1</td>
<td>0.7</td>
<td>39</td>
</tr>
<tr>
<td>Untidy dwelling place</td>
<td>18</td>
<td>12.5</td>
<td>13</td>
<td>9.0</td>
<td>15</td>
<td>10.4</td>
<td>61</td>
</tr>
<tr>
<td>Not able to accompany the elderly at moving outside the room</td>
<td>24</td>
<td>16.6</td>
<td>15</td>
<td>10.3</td>
<td>9</td>
<td>6.2</td>
<td>49</td>
</tr>
<tr>
<td>Neglect of wishes</td>
<td>7</td>
<td>4.8</td>
<td>6</td>
<td>4.1</td>
<td>9</td>
<td>6.2</td>
<td>71</td>
</tr>
<tr>
<td>2. Psychic maltreatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inappropriate relationship</td>
<td>12</td>
<td>8.2</td>
<td>7</td>
<td>4.8</td>
<td>6</td>
<td>4.1</td>
<td>48</td>
</tr>
<tr>
<td>Humiliating – vulgar relationship when speaking to elderly residents</td>
<td>5</td>
<td>3.4</td>
<td>7</td>
<td>4.8</td>
<td>4</td>
<td>2.7</td>
<td>38</td>
</tr>
<tr>
<td>Maltreatment</td>
<td>Daily</td>
<td>Daily</td>
<td>Once a week</td>
<td>Once a week</td>
<td>At least once a month</td>
<td>At least once a month</td>
<td>Seldom</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>--------</td>
</tr>
<tr>
<td>The presence of an angry and loud voice</td>
<td>9</td>
<td>6.2%</td>
<td>10</td>
<td>6.8%</td>
<td>12</td>
<td>8.2%</td>
<td>60</td>
</tr>
<tr>
<td>Making fools out of the residents</td>
<td>3</td>
<td>2.1%</td>
<td>0</td>
<td>0.0%</td>
<td>4</td>
<td>2.8%</td>
<td>29</td>
</tr>
<tr>
<td>Violation of intimacy</td>
<td>15</td>
<td>10.3%</td>
<td>2</td>
<td>1.4%</td>
<td>5</td>
<td>3.4%</td>
<td>54</td>
</tr>
<tr>
<td>Violation of privacy</td>
<td>14</td>
<td>9.6%</td>
<td>3</td>
<td>2.1%</td>
<td>6</td>
<td>4.1%</td>
<td>53</td>
</tr>
<tr>
<td><strong>3. Physical maltreatment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inappropriate feeding (too fast, too cold or too hot food)</td>
<td>13</td>
<td>8.8%</td>
<td>6</td>
<td>4.1%</td>
<td>1</td>
<td>0.7%</td>
<td>46</td>
</tr>
<tr>
<td>The elderly does not get the necessary therapy</td>
<td>1</td>
<td>0.7%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>0.7%</td>
<td>32</td>
</tr>
<tr>
<td>Exposure to unnecessary pains</td>
<td>0</td>
<td>0.0%</td>
<td>8</td>
<td>5.5%</td>
<td>9</td>
<td>6.2%</td>
<td>54</td>
</tr>
<tr>
<td>Rough handling</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>0.7%</td>
<td>23</td>
</tr>
<tr>
<td>Nursing care is delivered inappropriately</td>
<td>9</td>
<td>6.2%</td>
<td>7</td>
<td>4.8%</td>
<td>7</td>
<td>4.8%</td>
<td>59</td>
</tr>
<tr>
<td>The elderly is unnecessarily tied to prevent movement</td>
<td>6</td>
<td>4.2%</td>
<td>4</td>
<td>2.8%</td>
<td>3</td>
<td>2.1%</td>
<td>44</td>
</tr>
<tr>
<td>The elderly is kept too long in an inappropriate position</td>
<td>5</td>
<td>3.4%</td>
<td>10</td>
<td>6.8%</td>
<td>3</td>
<td>2.1%</td>
<td>83</td>
</tr>
</tbody>
</table>
Table 10. Nursing staff’s assessments of their well-being at work (N=148).

<table>
<thead>
<tr>
<th>Staff well-being</th>
<th>Daily</th>
<th>Once a week</th>
<th>At least once a month</th>
<th>Seldom</th>
<th>Never</th>
<th>I can’t say</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work related well-being</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling physically tired</td>
<td>45</td>
<td>68</td>
<td>17</td>
<td>16</td>
<td>11.0</td>
<td>0</td>
<td>146</td>
</tr>
<tr>
<td>Feeling psychically exhausted</td>
<td>34</td>
<td>50</td>
<td>29</td>
<td>29</td>
<td>19.9</td>
<td>4</td>
<td>146</td>
</tr>
<tr>
<td>Inadequate number of nursing staff in the ward</td>
<td>36</td>
<td>68</td>
<td>17</td>
<td>18</td>
<td>12.4</td>
<td>6</td>
<td>145</td>
</tr>
<tr>
<td>Too many responsibilities</td>
<td>46</td>
<td>37</td>
<td>18</td>
<td>38</td>
<td>26.0</td>
<td>7</td>
<td>146</td>
</tr>
<tr>
<td>Relationship related well-being</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition of inappropriate relationship among nursing staff</td>
<td>11</td>
<td>19</td>
<td>27</td>
<td>68</td>
<td>46.6</td>
<td>21</td>
<td>146</td>
</tr>
<tr>
<td>Getting real understanding and help of the leading staff</td>
<td>69</td>
<td>36</td>
<td>15</td>
<td>23</td>
<td>15.9</td>
<td>2</td>
<td>145</td>
</tr>
<tr>
<td>Possibility for professional education in elderly care</td>
<td>2</td>
<td>1</td>
<td>37</td>
<td>94</td>
<td>65.3</td>
<td>10</td>
<td>144</td>
</tr>
<tr>
<td>Relying on help of the nursing staff</td>
<td>84</td>
<td>26</td>
<td>16</td>
<td>18</td>
<td>12.5</td>
<td>0</td>
<td>144</td>
</tr>
</tbody>
</table>
Nursing staff members were mainly not satisfied with their salary, as 67.7% responded with “insufficient” and with the progress in institutional elderly care as they got too little opportunities for professional education (more than 70% responded seldom or never).

Cross-tabulations showed some statistically significant differences emerged on staff well-being issues between wards, where respondents from dementia ward were less physically and mentally tired. On the dementia ward, 23.5% of staff expressed seldom physical tiredness, as compared to below 10% by other two wards (p=0.047). Also, 38.2% of them expressed seldom or no psychical exhaustion, compared to significant lower values by other two wards (p=0.027). Especially psychically strained proved to be work on residence wards, where only 6.5% of staff expressed that they felt this problem seldom or never.

Graduated nursing staff were more satisfied with their salary (p=0.017), however they had longer employment time and therefore automatically a higher salary. 50% of registered nurses stated that their salary was good or sufficient, compared to 30% by other two groups (caregivers and nursing assistants).

6.3 Summary of the main results

Qualitative research about quality of institutional elderly care from residents’ point of view showed that residents expect from staff members to express friendliness, willingness to help and to take time for their needs. Nursing care and hygiene, although an important issue, was not expressed as priority, since residents were not that much concerned about aesthetic look. By separating needs to physical and psychosocial care, residents on average expressed more importance to psychosocial care, like for example human emotional relationship. Additionally, residents were asking for more social activities or events to enjoy themselves or to show that they are still capable to achieve something. The institutional elderly care offered was by their opinion incomplete, since due to hastiness they felt uncomfortable and communication time was short. Nevertheless residents expressed that in general they were satisfied with offered care, but many also said: “We have to be.”

Relatives compared to residents, gave grater importance to nursing care in conjunction with quality food, hygiene, getting medicine at prescribed time etc. An additional issue of quality was good communication with residents, to find out about their health problems, since relatives by their own experiences with elderly, saw this as a demanding task. Comparison between physical and psychosocial
needs overbalance quality to physical needs. Relatives requested from staff members protection and physical safety of residents as some of them reported cases of injuries. They also welcomed organisation of social activities or events and were delighted to take part themselves. Relatives expressed more deficiencies of offered care than residents, especially those being visual. They were unhappy to see untidy residents, unclean or uncomfortable apartments without adequate furniture and obsolete equipment. Due to more-bedded apartments, privacy and intimacy was not protected. Relatives exposed inadequate staff regulations and by their own judgement would not be able to cope with the amount of work. Relatives were especially unsatisfied by provision of poor nutrition and fast feeding, endangering residents to choke.

Quality of institutional elderly care and elderly care offered from nursing staffs’ point of view was primarily expressed as satisfaction of physical needs. Satisfying psychosocial needs were seen as a part of quality nursing care, but staff members expressed their inability to fulfil expectations because of inadequate staff regulations. Quality or humane nursing care should not have timed interventions, by their expression this can not be of interest to human dignity. Quality of institutional elderly care as they understood it could not be realised by the present legislation. Quality of institutional elderly care should be holistic, home-like environment should be brought closer to residents and nursing interventions should be made when needed and not by program or being task orientated. Nursing staff evaluated offered institutional care as professional with unprofessional communication. Further dissatisfaction with changing working conditions was stated as: “Staff is getting less, paperwork is getting more.”

Cross sections between expressions of residents and nursing staff were found in satisfaction of needs and availability of staff members for conversation or perhaps some company. Cross sections between residents and relatives could be presented as possibility to get help when needed and if possible in reasonable amount of time. Relatives and nursing staff members agreed on quality institutional elderly care by adequate hygiene and also by having enough staff at disposal, since residents understood occasional difficult circumstances in caring for elderly people, regarding their health and mood. Defining cross section of all three views of quality institutional elderly care presented a difficult task, but in majority of statements quality should concentrate on meeting needs. Needs should be met when they emerge, regardless of nursing care, conversation, various activities or some other help, and they should be met in reasonable time interval, not by program or in spare time. Figure 9 presents important cross sections
between residents, relatives and nursing staff views of quality institutional elderly care. Each circle in the figure presents main issues expressed by individual views about quality of institutional elderly care.

Quantitative research involved nursing staff members only and the obtained results confirmed the results of qualitative research. Staff members assessed themselves to be best at or had more knowledge in meeting residents' physical needs. Comparison between physical and psychosocial care resulted in statistically significant differences. Staff members expressed that they do need some additional knowledge or skills, to meet physical needs, like respiratory troubles. Recognition of maltreatment was mainly present as neglect of care by postponed duties or hastiness in nursing interventions providing discomfort to residents. Also, violation of privacy and intimacy were expressed and an unwillingness to help residents in self-care to preserve their autonomy. Interviews of all parties provided direct or indirect statements describing or confirming the above mentioned forms of mal-treatments. Regarding nursing staff well-being, inadequate staff regulations put staff members under physical and mental fatigue.

Fig. 9. Cross sections of quality institutional elderly care from residents, relatives and nursing staff points of view.
7 Discussion

Discussion starts by description of reliability and validity of the study. Chapter 7.2 discusses about institutional elderly care offered in Slovenian nursing homes. A part of this chapter presents discussion about nursing staffs’ recognition of maltreatment and their well-being. Chapters 7.3 and 7.4 discuss individual views about quality of institutional elderly care by residents, relatives and nursing staff members. Chapters 7.5 and 7.6 provide main results and some implications for future development.

7.1 Reliability and validity of the study

The reliability and validity of the study were enhanced by the use of a two-part research design, triangulation of data sources and methods. The study sample was heterogeneous with respect to several important demographic variables, such as gender, age, education and proportion of employees and residents working or dwelling in public and private sector. Reliability and validity of the study were evaluated separately for qualitative and quantitative study. Trustworthiness of qualitative study was ensured by choosing appropriate sample of respondents, by tape-recording and by carrying out all interviews under equal conditions. Validity of the instruments was preserved by adequate translation into Slovene language and by content, construct and criterion validity.

7.1.1 Trustworthiness of the qualitative study

Reliability of the study was approached by consideration of credibility, dependability, confirmability and transferability, the concepts used to describe various aspects of research trustworthiness (Lincoln & Guba 1985, Patton 1987, Polit & Hungler 1999). Appendices and tables were used to demonstrate links between the data and results (Polit & Beck 2004). Also, authentic citations were used to increase the trustworthiness of the research and to point out to readers from where or from what kinds of original data categories were formulated (Patton 1990, Sandelowski 1993). The analysis process and the results should be described in sufficient detail so that readers have a clear understanding of how the analysis was carried out and its strengths and limitations (Government Accountability Office 1996). The purpose of assessing trustworthiness of a study is to determine whether or not the data collected provides a true picture of the phenomenon in the

Credibility deals with focus of the research and refers to confidence in how well data and process of analysis address the intended focus (Polit & Hungler 1999). Credibility was strengthened by use of triangulation, where data was gathered from three parties involved in institutional elderly care. The researcher personally conducted all interviews and the analysis. The second step assuring credibility was involvement of another researcher from the field of gerontology and institutional elderly care. Categories formed by the researcher were confirmed by another researcher who also analysed all the interviews in full length. Both researchers were unanimous about the formation and contents of the categories.

According to Lincoln & Guba (1985) dependability represent the degree to which data change over time and alterations made in the researcher’s decisions during the analysis process. Dependability was addressed by sample selection of long-time residents in nursing home, who started dwelling in residence ward and were later transferred to nursing ward. Also, relatives selected for the interviews were several years’ frequent visitors of nursing homes and they had experienced several positive and negative situations regarding care or relationship to residents. Some of the interviewed relatives were also active participants in the care provision. Therefore, their opinions and statements were subject of longer observation of life of residents in nursing homes and were not the result of some subjective short time positive or negative developments. Selection of nursing staff was done according to nursing experiences calculated from background data obtained in quantitative analysis and according to approximate education employment scheme.

Confirmability refers to “objectivity” in conventional criteria. The findings should reflect the inquiry and not the researcher’s biases (Lincoln & Guba 1985). In order to fulfil the criterion of confirmability the various phases of the research and solutions of qualitative data analyses have been explained as carefully and precisely as possible to avoid misinterpretations. The initial transcriptions were checked very carefully by reviewing the interviews from audiotape. The original data was transcribed and first analyzed as a whole conversation in order to understand the context of the utterances. The obtained categories were again reviewed in the wider context of the whole conversation at the end of the analysis. The confirmability of the study was further enhanced by comparing the obtained results with earlier studies and knowledge.
Transferability refers to the extent to which the findings can be transferred to other settings and groups (Polit & Hungler 1999). To facilitate transferability, a clear description of the context, selection and characteristics of participants, data collection and process of analysis were provided. Transferability was pursued by incorporating excerpts from interview (original) data to constructed codes, categories and figures (appendix 3). Access to the analysis procedure gives other researchers the ability to transfer the conclusions to other cases, or to repeat, as closely as possible the procedures of this study (Lincoln & Guba 1985, Yin 1994). Fulfilment of the criterion was sought by presenting the field of elderly care with general concepts so that sufficient abstractness of the institutional elderly care phenomenon could be guaranteed. The abstract concepts of institutional elderly care phenomenon have been expressed so that they are not linked only to certain situations. It may be considered that the ascertained proposals are adaptable to several operational situations. Since results of this study are substantive and not formal, they may not be generalised to concern anything but institutional elderly care in nursing homes.

Informal purpose of this study was to present the institutional elderly care phenomenon with all its features to the awareness of health care, legislature, social welfare personnel and other readers. Regardless of the considerations relating to the reliability of the study, a good overall picture of institutional elderly care phenomenon and its characteristics was presented by the chosen research methods and obtained findings.

**Qualitative study limitations.** Reliability of obtained data was not confirmed by repeated interviews, due to ethical considerations, changing health conditions of elderly participants and because of delicate nature of the study. Also, repeated interviews sometimes lead to diminished reliability (Sandelowski 1993). Older population has to be understood, they are particularly sensible or peevish according to their mood, health condition, pain or family relations. Their opinion of dwelling and care in nursing homes could be therefore distracted. To reduce the above mentioned influences, interviews were made in situations where elderly residents felt well, were rested, without pain and without influence of drugs. The influence of difficult family relations could not be entirely ruled out, therefore in each interview we asked and discussed about these relations, if they were constant or they fluctuated. Residents showing signs of sadness were kindly solaced and their statements were considered with special attention.

The physical and mental condition of each interviewed relative was also considered by careful conversation about their own health conditions, family
situation at home and condition of their elderly resident. Interviews with staff members were made in their spare time, they were asked to choose the interview time by themselves, when they were available and in case of sudden unexpected duties, had an option to get a replacement. In that manner none of the 60 minute interviews were interrupted because of unexpected working duties. Each interviewed staff member was carefully asked about current situation in nursing home, if there were some incidents (danger of loosing their job, bad relations with elderly residents, working overload, transfer to another ward etc.) that could result in a too subjective evaluation of their own work and work of their colleagues.

All important citations in the interviews were mostly stated in the first quarter of the interview or in first 15 minutes. In the later part of the interviews research turned to common conversation and citations in general only repeated. Residents began to tell about their life history, their family and their expectations for the future. An impression was obtained that in some way, the interviews were used for conversation, confessions and expression of feelings, they wish to experiences more often. Some relatives, on other hand, became more critical as the interviews proceeded, expressing perhaps too romantic or unreal expectations of nursing home dwelling. Nursing staff members turned their point of view to political themes, once more expressing unreasonable staff regulations and poor governmental support of institutional elderly care. They started to complain about advanced aged residents and additional demand for hospital like nursing interventions.

The next issue of getting reliable data was sought in a manner of animating elderly residents to repeat their statements several times, during the 60 minutes interviews. In case of conflict or doubtful statements, the elderly were kindly asked to repeat, explain precisely or rethink their statements or opinions. If those measures did not help to get clear opinion, later in data analysis these statements were not considered.

The quality of interview data relies heavily on interviewer proficiency (Polit & Beck 2004). Elderly people are difficult to make conversation with or to interview them, due to various health related reasons, or they might not understand the theme and start talking about similar issues. In that manner it may come to the situations of pry. Being the interviewer, I had lasting experiences in working with elderly people. For 23 years I worked as a community nurse and since 1998 I have been in charge of the clinical practice in nursing homes where I spend approximately 4 hours a day. During this time I have conducted many informal interviews with elderly clients.

7.1.2 Reliability and validity of the quantitative study

The adequacy of the research process was examined by assessing the validity and reliability of the results. The validity of the quantitative study was addressed by content validity, face validity, construct validity and criterion-related validity. Reliability of the instruments was statistically conducted and, finally, some issues about generalisability are being discussed.

Validity is a measure of the truthfulness and accuracy of a study in relation to the phenomenon of interest, while reliability represents the consistency of the measure attained (Burns & Grove 2005, Polit & Beck 2006, Rolfe 2006b). Validity refers to the degree to which an instrument measures what it is supposed to be measuring (Polit & Beck 2004). Three types of validity are often reported: content validity, construct validity and criterion validity (LoBiondo-Wood & Haber 1990, Sonninen 1997, Burns & Grove 1999, Polit & Hungler 2001).

Content validity. Content validity is used to evaluate how well the concepts in a study have been operationalised (Polit & Hungler 1999). Content validity can be shown by a broad literature review and assessed by a panel of experts on the area concerned and increases through the assumption of a logical tie between various items and the study area (Burns & Grove 2005). The instruments used in this study were designed by the experts, and they were used several times before (Kivimäki & Lindström 1991, Kivimäki & Lindström 1992, Voutilainen 1994, Isola & Voutilainen 1998, Isola et al. 2001). Items were added to the instruments according to previous research findings before and during the 90’s. By the literature review I was able to identify all items included in the instruments. Some of the items used in this study were recognised by international literature as being of major importance in the field of nursing care and recognition of maltreatment in nursing homes.

The original questionnaire had been used previously in the Finnish language. The translated version into English language was sent to Slovenia by regular post and then translated into Slovene language. The purpose and criteria of the
translation process was to ascertain the contents of the items and their understandability. In order to guarantee a quality translation of the English questionnaire into the Slovene language cooperation of three independent official translators was organised. The questionnaire was translated into Slovene by the first official translator with the researcher’s help. Then the questionnaire was translated back to English by the second official translator. Both English versions were afterwards compared by the third official translator who ascertained that all the questions had preserved the original meaning (Harkness 2003). The original questionnaire items did not provide any inconvenience or offence for study participants with regard to cultural sensitivity. Therefore, all items were translated to Slovene language without any changes.

Although there have been no completely objective methods of ensuring the adequate content coverage of an instrument it is becoming increasingly common to use a panel of substantive experts to evaluate and document the content validity of new instrument (Polit & Beck 2004). In this study no expert panel was involved to evaluate used instruments. Various items of the instruments were identified or retrieved as quality indicators in the scholarly literature.

Face validity. Before using the questionnaire, it was pre-tested by ten members of nursing staff. The researcher asked the participants to read the instruments very carefully and give their comments about the context. By their opinion, instruments were adequately organised and items (questions) were relevant, logical and understandable. The face validity of the instrument was found to be convenient. As Campbell & Russo (2001) stated the content should be relevant to enable the respondents to answer the questions.

Construct validity. Construct validity was evaluated by statistical methods. Factor analysis was performed using a procedure called principal axis factoring (PAF) with varimax rotation (appendix 4). Factor analysis is a mathematical procedure that identifies clusters of related items within an instrument. The resulting clusters are called factors. Items must significantly (>|0.30|) “load” or group onto a factor to be considered as belonging to that factor (Pett et al. 2003). Two more terms are important explaining factor analysis results: variance and total variance explained, respectively. Variance is a measure of variability or how much the scores vary from each other and the mean (average score). “Total variance explained” is the amount of variability in all items explained by the underlying factor structure of the entire questionnaire (Salkind 2004).

The instrument measuring how well the residents’ individual needs are met resulted in four factor solution. Factor loadings ranged from 0.34 to 0.83. The total
amount of variance explained by the four factors was 56.6%. Three factors extracted were describing psychosocial needs and one physical needs. Item: “help at drinking and eating” loaded equally significantly in two factors, demonstrating that the question could be measuring more than one concept; nevertheless it was added to physical needs. Item “guarantee the suitable temperature and moisture” loaded with 0.83 in factor describing psychosocial needs. Item was considered as a part of physical needs subscale, like predefined.

The instrument measuring knowledge and skills to meet the residents’ needs resulted in four factor solution. Factor loadings ranged from 0.26 to 0.84. The total amount of variance explained by the four factors was 60.0%. One factor was describing physical needs and other three psychosocial needs. Item: “give independent hygiene and dressing” was below threshold although it loaded highest in factor describing physical needs. Two items: “help by respiratory trouble” and “recognition of pain” loaded equally significantly in two factors. Both were considered like predefined.

The instrument measuring how important nursing staff considers helping residents to meet their needs resulted in four factor solution. Factor loadings ranged from 0.42 to 0.85. The total amount of variance explained by the four factors was 63.1%. Two factors were describing physical needs and other two psychosocial needs. Item: “help by respiratory trouble” loaded with 0.85 in factor with psychosocial needs. Item was considered as a part of physical needs subscale, like predefined. Additional two items loaded equally significantly in two factors, “help by troubles with resting and sleeping” and “confronting with the death of the resident”, respectively.

The instrument measuring recognition of maltreatment to residents resulted in six factor solution. Factor loadings ranged from 0.42 to 0.85. The total amount of variance explained by the six factors was 62.0%. One factor was describing negligence in care, two factors psychical maltreatment and three factors physical maltreatment. Six items did not loaded in factors according to expectations.

The instrument measuring nursing staff well-being resulted in three factor solution. Factor loadings ranged from 0.15 to 0.94. The total amount of variance explained by the three factors was 63.3%. Two factors were describing work-related stress and one factor work-related well-being. Two items “recognition of inappropriate relationship among the staff members” and “rely on help of the staff members” predefined as part of work-related well-being had very low loadings.

In four instruments items loaded to factors according to expectation or to predefined constructs with rare exceptions. The instrument measuring recognition
of maltreatment resulted in many items that did not loaded to predefined constructs. Items describing psychical and physical maltreatment loaded to the same factor. A possible explanation could be that the sample of 148 respondents was not large enough for 23-items factor analysis.

**Criterion validity.** Criterion-related validity involves determining the relationship between an instrument and an external criterion (Polit & Beck 2004). Since Slovenian nursing homes have not measured or reported quality indicators connected to institutional elderly care there was no external criterion available to compare to five instruments scores used in this study. Therefore, criterion validity could not be considered.

**Reliability.** The reliability of the instruments was tested by Cronbach’s alpha coefficients, which show how homogenous items make up one subdimension (Cronbach 1951, Burns & Grove 2005). Each item correlates with other items on the instrument. Alpha coefficient is based on the variance–covariance matrix. The range of values for alpha coefficient is the same as for the other forms of reliability: values range between 0 and 1, and values closer to 1 reflect a higher level of interrelatedness among the items. The more interrelated the items are, the greater the reliability (Konicki Di Iorio 2005). However, a very high alpha coefficient may also be indication of a too homogenous instrument (Burns & Grove 2005).

For Cronbach’s alpha coefficients, the following values were calculated; meeting the elderly clients’ needs 0.78, adequacy of staff knowledge and skills in meeting elderly clients’ needs 0.82, staff’s view of the importance of the need to meet elderly clients’ needs 0.81, maltreatment of elderly persons 0.89. The scale measuring well-being of nursing staff was with $\alpha$ value of 0.68 just slightly below desired threshold. Based on the coefficients, all scales except that of measuring staff well-being seemed to have good internal consistency ($\alpha > 0.70$) (Nunnally & Bernstein 1994).

Reliability and validity calculated from this study in Slovenia showed comparable reliability to the Finnish studies in years 1998 and 2001 (Isola et al. 2001). In both studies alpha coefficients were above 0.7, with an exception of the instrument measuring staff well-being.

**Generalisability.** Generalisability presents the criterion used in quantitative studies to assess the extent to which the findings can be applied to other groups and settings (Polit & Beck 2004). The selected sample and results of this study were reliable and valid to extent that they could be applicable for Slovenian institutional elderly care. Currently, for a more extended application on the
European level, some deficiencies exist, according to other countries, that need to be considered. Slovenian institutional care has no relevant international research and suggested nursing home quality indicators are not systematically assessed. It is also difficult for the elderly, before being admitted, to compare facilities for their quality. Nevertheless, the findings of this study could be useful to compare nursing staffs’ perceptions to similar research in other countries. Also, recognition of maltreatment could provide some options for comparison and further research. Meanwhile, some nursing homes in Slovenia were in possession of ISO 9001 certificate for quality management.

7.2 Institutional elderly care offered in nursing homes

The study’s findings of institutional elderly care offered provided a major deficiency in inadequate nursing staff regulations. Due to a strong belief that this will not change soon or will even get worse, quality will have to be achieved by other measures. Nevertheless, staff members have to cope daily with physical tiredness and mental exhaustion, due to many responsibilities and overburdening, also reported in other studies (Bowers et al. 2001a, Morgan et al. 2002, Jerrard 2003). Physical tiredness could be avoided by a more regular exchange of staff between wards, since all residents do not have the same demand for nursing care and also by acquiring knowledge of kinesiology. Relations between colleagues and superiors were expressed positively and staff members could rely on each other help, results that correspond to a similar survey research in the south-western part of Slovenia (Kobal-Straus 2006).

Residents expressed insufficiency of nursing staff, consequently leading to physical maltreatment and unprofessional communication which was in concordance to previous studies (Schnelle et al. 2004, Cherry et al. 2007). Physical maltreatment was expressed in a manner of fast nursing care, due to timed nursing interventions and fast feeding. Residents experienced stress of nursing staff as primary issue regarding insufficient communication and hastiness in general. Fortunately, most residents stated that they were satisfied with offered nursing care, although it may be possible that they just have to be satisfied, since they have no other options. Staff members expressed their belief they were offering quality institutional elderly care, but they expressed problems to cope with timed nursing interventions and difficulties to establish sound communication with residents. Interrupting conversations and pretending interest due to the lack of time devaluates human dignity. Previous findings show that losing bodily
functions threatens dignity (Nordenfelt 2003). A critical concern is that inadequate staff to residents ratios negatively affects the quality of care (Mueller et al. 2006). Thus, simply adding more staff may be a necessary but not sufficient mean of improving quality (Castle 2008).

Relatives confirmed the problems about insufficiency of nursing staff, together with neglect of care und uncomfortable environment. These issues were also brought in connection to institutional elderly care in previous studies (Sacco-Peterson & Borell 2004, Teeri et al. 2008). Especially, uncomfortable environment, due to small and more-bedded dwellings without ergonomically adjusted bathrooms, represented for many relatives a major inconvenience. Also, by their opinion furniture in apartments was not arranged properly or it should be thrown to garbage. Consequently, good and adequate environmental or system resources like quality care, positive relationships with caregivers and peer-residents as well as environmental qualities like nice single-rooms with a private bathroom, may support frail residents’ efforts to maintain a positive experience and promote thriving in spite of their vulnerable situation (Bergland & Kirkevold 2006).

International studies, in general, suggest that family members seem to be satisfied with care in institutions (Voutilainen et al. 2006). These findings correspond with the results of this study, since most relatives were satisfied with offered nursing care with some remarks regarding mouth hygiene, infrequent showering and in some occasion smeared clothes. A major problem to relatives represented fast or inappropriate feeding, since residents are being at threat to choke, also due to lack of nursing staff. According to Simmons & Schnelle (2006) required time for feeding assistance seems to be between 35 and 40 minutes per meal for one resident. Residents who needed only supervision and verbal cuing required just as much time as those who were physically dependent on staff for eating. When self-assessed, staff members expressed high willingness to offer help in activities of daily living such as feeding and drinking, which require a professional approach and prove to be time demanding. Results of this study corresponded with previous results on the same instrument (Isola et al. 2008). Drinking and feeding should be a pleasant happening, something for residents to look forward to. Each meal should be prepared with care and in appropriate quantity. It should whet appetite. Special attention should be given to ill residents, where it is least polite to show impatience or lack of time. It may be the case that nursing staffs’ high willingness cannot make up for staff shortage entirely and cases of malnutrition may become inevitable. Malnutrition is a common problem
among nursing home residents and profoundly influences physical health and quality of life (Crogan & Corbett 2002, Elia et al. 2005). Among factors that contribute from moderate to high intake of energy, provision of preferred food was reported (Porter 1999, Crogan et al. 2004). Residents who eat or swallow slowly are sometimes forced to eat in order to avoid malnutrition (Porter et al. 1999).

Nursing staff members self-evaluated to be able to meet residents’ physical needs better than psychosocial needs, which corresponds with previous results using the same instruments (Isola et al. 2008). Regarding independent hygiene and dressing nursing staff expressed they have enough knowledge, but their skills are sometimes limited due to physical environment. Nursing homes in Slovenia do not have enough good accessories for bathing residents or taking showers (removable bath tub, shower cabins with chair, height-adjustable shower gurneys etc.). At the end of bathing nursing staff is not able to cloth resident properly because of tiredness. Many resident handling tasks are considered to be high-risk, based on the magnitude of weight lifted, awkwardness and unpredictable nature of the load lifted (resident), and sustained awkward positions used to provide nursing care (Nelson et al. 2006). Work is not ergonomically adjusted and takes much more physical strength. More opportunities to gain additional knowledge about ergonomics should be available. Collins et al. (2004) state that ergonomic program should be multi-faceted including resident handling equipment, comprehensive training on proper lift use with organisational implementation of a zero lift policy.

Nursing staff in this study did not pay enough attention to autonomy of self-care. These activities take time and patience, therefore residents should be allowed to try accomplishing them with the minimum assistance and they should be verbally supported by the nursing team members (Proot et al. 2000, Chang et al. 2007, Tuckett 2007). It is also a serious concern that only 11.5% members of the nursing staff had always time to listen to the residents’ problems. This is a warning about routinely performed work, mainly because of the overburdening of the nursing team and also because of low education (2006 in Slovenia around 50% of nursing staff represented caregivers). Low-educated staff might have lack of knowledge in communication (verbal and nonverbal) and inability for sensitive listening, which residents prefer mostly, and no broad perspectives from the humanities and social sciences (Guyatt et al. 2000). Communication presents a tool to achieve better relationships with residents and make them feel well. Furthermore, nurses depend on their communicative skills to be able to understand and meet the needs of their clients (Caris-Verhallen et al. 1998, Wadensten 2005). Both clients and nurses must have the courage to meet each other in
communication and it is believe that the secret of professional care lies partly in this vulnerability and interdependence (Solum et al. 2008). Staff members must be capable to advise residents, but most nursing staff have low education and therefore fewer competences in communication or the ability to give advices or informed consent. Studies show they rather avoid giving advice to prevent conflicts between residents, relatives and staff members (Leino-Kilpi et al. 2000, Scott et al. 2003a).

Residents arrive in nursing homes in old age of 80 years and more, with a lot of health problems, often accompanied by respiratory troubles. In that manner, nursing staff expressed low percentage in knowledge to cope with respiratory troubles of their residents. These specific skills can only be obtained by additional education or by additional educational programmes (Garibaldi 1999). Nursing staff must be capable to recognise seriousness of respiratory complications by monitoring and documenting respiratory assessment, vital signs, and respond to treatment in a manner to call for a doctor (Coleman 2004, Barakzai & Fraser 2008). Old age is often accompanied with pain; however, enough knowledge and skills to recognise and notice suffering state should be a basic knowledge in nursing care (Hager & Brockopp 2007). Lack of trust in the documented records of nursing care providers contributes to the overall problems in assessing and managing chronic pain (Fink 2000, Herr 2002). Relentless working pace and bad holistic approach present reasons for a lack of understanding or indolence. Nursing staff should pay special care to the residents after their falls and injuries, different kinds of chronicle deformations or illnesses, in palliative care or terminal phase.

The issue of free will was in previous findings also expressed as important, and that staff should pay respect to older people’s choices, such as choosing what clothes to wear (Gjerberg 1995, Woolhead et al. 2004), or rights to chose or refuse health care services (Coventry 2006). In this study staff members did not attribute importance to free will of residents, since they didn’t experience this as an important issue at all. As long as residents are able to care for themselves they dwell completely independent or autonomous. Regarding immobile residents, staff members in practice do pay attention to their choice. Residents’ rights must always be kept in focus in order not to violate these rights and to maintain their integrity (Scott et al. 2003b, Bolmsjö et al. 2006).

Nowadays, when mobile phone is everyday practice and a common means of communication, the residents can practically be always in contact with their relatives. Otherwise, nursing homes in Slovenia have a daily visits timetable from 9 am till 9 pm. If residents express special needs, this can be arranged by the leader
of the nursing team (the need for contact or relationship during the night). Nursing homes in Slovenia, especially older ones, do not have appropriate rooms to secure private conversations with relatives or even priests. Regarding the sexual needs in Slovenian nursing homes, there is no attention at all. Also, nursing staff do not have adequate education neither there are additional possibilities to gain knowledge in this regard. It is a common opinion that residents should deal with this matter on their own. Mobile residents have the chance to get personal visits. Good personal relationships proved to be more important than sexual needs (Robinson & Molzahn 2007).

Staff members in nursing homes are not proactive and do not promote themselves well (Harrington et al. 2006), and they do not present their work and mission in public media. As a consequence, the negotiations with the government for better working conditions, numerical adequacy of staff and higher salary have not been successful. On the other hand, nurses have an obligation to voice their concerns and lobby about issues that affect client safety (Shipman & Hooten 2007). Furthermore, organisation of nursing care is in many Slovenian nursing homes inadequate because residents who become immobile do not want to move to a nursing ward for psychological reasons. With the same capacity, nursing staff continue to care for those residents who from now on need much more attention.

To summarize findings about institutional elderly care offered, inadequacy of staff members was expressed from each viewpoint. The present situation in Slovenian nursing homes may blame the lack of staff as a cause of almost all deficiencies identified during the research. International studies, on other hand, suggest that the amount of nursing staff was connected to some physical care interventions like frequent repositioning in bed (Schnelle et al. 2004). Rush hours like morning care and especially feeding at lunch times could be successfully solved by part-time help (Remsburg 2004) or by involving relatives in the provision of care (Port et al. 2003). Unkind behaviour of staff members and their unwillingness to listen may have different origins than hastiness. Relatives and staff members expressed lack of motivation and imperfectly managed documentation, although for different reasons. Relatives felt the lack of motivation as a common condition of the whole society while staff members, on other hand, expressed low salaries, demanding older population and unsuitable organisation of work. In a previous study staff members expressed that problems with residents may arise if communication skills and behaviour knowledge were inadequate, since providing communication bridges the gap between residents and others in the environment (O’Connor & Kelly 2005). There was also some evidence that
personal characteristics should be considered important for distinguishing between nursing staff working with older people (Nolan et al. 2004).

**7.2.1 Recognition of maltreatment**

Nursing staff members did not report cases of rough physical maltreatment but recognised some forms of negligence in care and psychic maltreatment. The major problem expressed was inability to accompany residents to promenades due to being overworked. The second problem of untidy dwellings could be the reason for a poor cooperation between cleaning services and staff members being responsible to arrange adequate level of cleanliness in nursing home. Statistical significance between higher education and recognition of maltreatment resulted in registered nurses being more critical regarding maltreatment. Since education and nursing experiences correlated it is also possible that more experiences helped to recognise maltreatments. Similar forms of negligence were also reported in a research on detection and prevention of elderly abuse (Ross 2007). It is often the case that standards are not fulfilled. Assuring intimacy and privacy is a continuous problem in two-bedded or more-bedded apartments (in Slovenia this is the case in 65% and more of all apartments). Folding screens are not used to increase intimacy, because they are difficult to disinfect and this would probably lead to a higher risk of infection.

Previous research conducted in Slovenian nursing homes, on recognition of maltreatments from nursing staffs’ point of view, quoted physical cases before psychic maltreatment, followed by financial abuse, neglect and rare cases of sexual abuse (Veber 2004). Staff members in this study, on average, recognised more cases of neglect of care and psychic maltreatments than cases of physical maltreatments. Results of this study do not correspond to previous research, possible due to a raising awareness of physical maltreatments in society, since we already mentioned that this kind of research in Slovenia is in early stages.

Maltreatment and abuse of older people in residential care is a hidden and often ignored problem (Griffith 2008). Incidents of abuse and neglect are thought to be widely undetected and underreported (Baker & Heitkemper 2006). Maltreatment can be perpetrated by nursing staff, relatives, friends and strangers, and can take many forms. Maltreatment is often considered to take the form of rare dramatic incidents or violence due to poor practice, neglect and poor management (Goergen 2001, Voelker 2002). Most perpetrated occur at persons’ home (67%), with some 22% in nursing homes and 5% in hospitals (House of Commons Health
Committee 2004). Reasons for abuse by employees in nursing homes can be found in staff turnover, job burnout, job dissatisfaction and stress (Harris & Benson 2005). Some international governmental statistics reported from 4 to 9% of older population being regularly subject of maltreatment or abuse (World Health Organization 2002, House of Commons Health Committee 2004). Those findings, in general, comprise with results in this study, although mean values of reported cases exceeded 9% of occurrences on daily basis. Established routines, habits and problem solving can make abuse possible, invisible and persistent over time (Solum et al. 2008).

7.2.2 Nursing staff well-being

Nursing staff reported signs of physical fatigue in 47% (once a week or more often) and psychical fatigue in the same manner was felt by more than third of the respondents (34%). Previous international findings using the same instrument for staff members well-being, reported 42% of physical fatigue once a week or more often. Mental fatigue, once a week or more often, was reported by nearly one fifth or 20% of the respondents (Isola et al. 2008). The reason for lower percentage can be explained by better staff regulations and working environment in foreign countries, allowing staff to reduce some stress. My conclusion was that physical fatigue is already of high value and mental fatigue will probably, in years to come, reach the same percentage, due to a more demanding older population in the future with regard to the nursing care provision. Nursing personnel in a similar study showed a significant correlation between stress and inadequate preparation to meet the emotional needs of clients and performing job duties (Roberts-Kennedy 2005). Results of this study show that nursing staff received understanding and help from the management and could rely on their colleagues’ help, both items being expressed about 50% on daily basis. A similar research on factors influencing staff well-being concluded that most important factor was support from management, to care, to listen and to help reduce stress and burnout (My InnerView 2007).

7.3 Quality of institutional elderly care from the residents and relatives point of view

Primarily, residents in this study expressed that nursing care should be done by agility they can cope with and especially, they would like to experience more natural care by water and soap, without other chemistry. This habit is lately
proving less suitable, since some findings show that washing with regular soap and water is harmful to some residents with associated problems such as dry skin, contact dermatitis, and eczema (Scardillo & Aronovitch 1999, Newman 2001). Nevertheless, residents enjoyed traditional washing with water and soap and dislike novelties in care. In recent years, nursing homes began to use cosmetic products, without any use of water for intimacy care, that are less aggressive than regular soap, protect skin and dispose offensive smells. Previous studies also suggest that residents complain about fast care (Williams 1998, Tuckett 2007).

According to the residents, they would like to experience friendly behaviour and sound communication between them and nursing staff members. Residents want to communicate more, not to just exchange everyday greetings (Tuckett 2007). The elderly enjoy friendliness and kind words when being sad, since the process of ageing is often related to a feeling of vulnerability, loss of self-identity and of being subject to negative attitudes (Moody 1998, Woolhead et al. 2004). Staff members should be available by taking time to listen to them, if there is a story to tell or problems to be expressed.

The results of this study show that residents did not emphasize the importance of personal hygiene. Reasons for that could be that provided nursing care by the nursing staff is of quality and no bigger problems were present. Residents wish that some time intended for nursing care provision should be spend for conversation or company, which was also concluded by Davies et al. (2000) and McCormack (2003). Finally, residents also requested that someone should be available to accompany or escort them outside to promenades to breathe some fresh air. Previous studies also confirmed the importance of going to promenades and company to tighten residents-staff relations (Bates-Jensen et al. 2004, Schnelle et al. 2004).

Frail residents in a similar research reported social contacts as the most important factor for quality of life, while the non-frail residents reported health being most important (Puts et al. 2007). Similar findings were reported from other studies (Fry 2000, Borling et al. 2005). In this study, residents did not say much about their health condition; interestingly, one female resident injured herself and expressed sadness due to poor family relations. It seemed as, before the injury, poor family relations provided no inconvenience to her.

Some residents stated that they had experienced nursing staff being reluctant or unhappy, and their perception was that it is difficult to provide quality care having mental fatigue or being unsatisfied with working conditions. Some recent empirical studies have found that greater resident satisfaction was associated with
higher staff job satisfaction (Redfern et al. 2002, Sikorska-Simmons 2006). Like all individuals, staff members also try to maintain their well-being, good relations to colleagues and residents, usually reflecting the quality of institutional elderly care (Shimizu et al. 2005, Kobal-Straus 2006, Castle et al. 2007).

Previous studies show that some aspects of institutional elderly care, such as information received from staff, activities provided to care recipients, and relatives’ opportunities to participate in care provision, having the opportunity to go out for a walk, taking part in leisure activities were rated lower by the residents (Kirkevold & Engedal 2006). Results of this study only partially comply with the above findings, since going out to fresh air was important issue to residents, connected to social activities and getting help.

Relatives in this study were primarily concerned about the quality of food the residents get served and that liquids should always be at disposal, which was in concordance to previous studies (Barton et al. 2000, Simmons et al. 2003). Satisfaction with food can lead to increased food intake and improved nutritional status (Crogan & Evans 2006). Additionally, relatives expressed the need for good personal hygiene without use of aggressive cosmetics. Relatives also indicated that more technology could increase the quality of life of residents in a manner to decrease waiting times and therefore a better and physically safer environment could be established. Comfortable and safe environment with comfortable dwellings, adequate furniture and modernised bathrooms should be provided to prevent unnecessary injuries of residents. Communication was also an issue of quality institutional elderly care; relatives expressed a desire for more social gatherings with staff members or heterogeneous social activities in nursing homes. International studies show that residents are still spending most of their time in their rooms alone, doing nothing (Kane 2001, Harper-Ice 2002). Therefore, we need to further consider the environment and reconsider assumptions of what enhances pleasantness and engagement for residents. Further research is needed to determine how much activity is needed to promote self-esteem, a sense of control, and a meaningful life. In that manner, identity of residents would be better preserved and also respect of human dignity upheld (Irurita & Williams 2001, Teeri et al. 2008).

Hasson (2006) found that the basic elements of nursing care, such as personal hygiene, meals, and physical transfers, were rated high by care recipients and their relatives. Relatives in this study confirmed the above findings while, on other hand, residents did not expose personal hygiene, but they expressed that nursing care should be done by agility they can cope with. Less critical relatives expressed...
that if residents were satisfied with institutional elderly care, then they were
satisfied too, also reported by Petterson et al. (2006). Nevertheless, client
satisfaction has already been in use as an instrument to evaluate quality of
institutional elderly care (Hasson 2006).

Some relatives who participated in this study were actively involved in
nursing care provision and in that manner also helped nursing staff members. The
negative side effect may be that, with time, relatives may get sense of being
indispensable, leading to frictions with staff members. Ryan & Scullion (2000)
conducted that the role of family members was either overestimated by the family
or underestimated by nursing staff. Avoiding those frictions, nursing staff
members and nursing homes in general should consider encouraging active
residents to acquire additional skills, to participate in care provision even more and
disburden own personnel (Davies & Nolan 2006).

There was relatively little within the literature concerning the roles that family
caregivers might play following an older person’s relocation to nursing home. A
number of studies suggest that role redefinition is a crucial task for relatives
following placement of their elderly family members in residential care (Ryan &
Scullion 2000, Sandberg et al. 2001). Some authors describe crucial role of
relatives to be involved in sustaining family connectedness, upholding their
relative’s dignity and hopes, planning quality care due to specialised knowledge of
the older person, and helping their relative maintain control of the environment
(Kellett 1996). Relatives possess knowledge in relation to the older person and
their desire to convey this to staff member as a basis for care planning becomes
increasingly apparent (Pillemer et al. 1998, Sandberg et al. 2002).

Cross section of quality institutional elderly care between residents and
relatives points of view was not very evident. Residents saw quality in adequate
staff relations to them, by kindness or friendliness in connection with respectful
and human emotional relationship. They were asking for staff availability for some
conversation or help in various everyday needs and situations. Staff availability
and getting help from residents viewpoint was also found of major importance in
previous research (Bergland & Kirkevold 2006). For residents, hygiene or
nutrition was not an important issue, probably because most of them faced tough
times in their history of life, participating in 2nd World War and after that suffering
in communist political regime. Both, residents and relatives agreed about nursing
staff to be available and that residents would not need to wait for help. Relatives’
quality concerns about hygiene, quality food and sound environment could also be
introduced as form of availability to help residents thrive. Cross section between
viewpoints was formulated as getting help, without unnecessary waiting. In concordance to this conclusion, previous findings conducted that thoughtful nursing staff, willing to help, could ease residents’ nursing home life (Bergland & Kirkevold 2006). In case residents, despite being helped, were not able to thrive, focus on the environment may prove decisive (Haight et al. 2002).

7.4 Quality of institutional elderly care from the nursing staff point of view

Staff members saw quality of institutional elderly care primarily from the view of physical needs satisfaction although they also in majority stated that psychosocial needs are part of quality nursing care and part of individual approach, which was also reported in previous studies (Holtkamp et al. 2001, Isola et al. 2003). To meet quality, adequate staff regulations and good organisation of work are needed. Staffing, the educational level of the staff and management skills have been used to explain variation in quality of care (Bostick 2004, Schnelle et al. 2004). Previous studies confirmed that working conditions of nursing staff have been seen as an especially important factor influencing the quality of care (Robertson et al. 1995, Hannan et al. 2001). Hannan et al. (2001) concluded in their literature review that increased work satisfaction and decreased stress among nurses probably improve quality of care, but added that the association seems to be complex and there might be several factors, such as management style and group cohesiveness, that influence the relationship between these factors. A surprising result in this study was the difference of just two years on average between nursing experiences and employment time in current working unit. Nursing home was for many nursing staff members their first work experience. There were no existing requirements or specific conditions to work in nursing homes, like for example nursing experiences, which was also reported by Runciman et al. (2002). Results in this study regarding staff members’ knowledge provided some dilemma since it was difficult to conclude, if more knowledge resulted due to higher education or more nursing experiences.

Nursing staff expressed that nursing interventions should be done by standards, which means by adequate staff regulations, time to explain the interventions to residents and also verbally stimulating their self-care, which was in concordance to Stabell et al. (2004). The nursing staff expressed the need for observation of residents and more individual approach, where residents could explain what they want and if they are satisfied with offered care. Also, better
communication (joking, humour, warm touch etc.) should be possible because staff responded that this is one of the important activities to maintain pleasant atmosphere and human dignity among staff members and residents and even relatives, issues that were also reported by Bouchard Ryan (2000) and McCreadie (2008). Staff members also expressed that protection of intimacy is important to assure quality elderly care. Protection of intimacy may be only a psychological feature but it was found very important for the well-being of residents (Williams 2001). One of the problems to maintain intimacy or privacy in Slovenian nursing homes was due to more-bedded apartments. Staff members expressed they should have more time available to help residents at eating and drinking. Residents should be clean, smartly dressed and have tidy dwellings.

Nursing staff members for themselves and their profession expressed importance of individual approach, whose implementation can primarily be met by adequate staff regulations and organisation of work. Schnelle et al. 2004 conducted that better staffed nursing homes scored higher by some measured quality indicators. Individualized care was found as an important component of quality nursing care (Suhonen et al. 2002, Schmidt 2003). Quality of institutional elderly care by nursing staff opinion comprises many human virtues, difficult to learn, like empathy or determined but yet good-hearted accession to the older person. A crucial step in providing dignified care is the establishment of a nurse-client covenant (Coventry 2006).

The issue of advocacy was expressed primarily because of the intimate nature of the relationships nurses have with their clients. Nursing staff members should speak out and speak for residents and compel to act on unmet needs (Hanks 2008). Many studies suggest that higher education leads to increased perceived assertiveness and to speculation that advocacy and acting as an advocate may be dependent on educational level (Altun & Ersoy 2003, Kubsch 2003).

Staff members in nursing homes, on average, have lower education compared to hospitals. The basic needed education in hospitals was nursing assistant. In Slovenian nursing homes around 50% of all staff members are caregivers, primarily to reduce staff costs. The conclusions were also similar in previous studies (Hicks et al. 1997, O’Neill et al. 2003). Many people entering nursing homes are discharged from hospitals and they need the same nursing interventions when they were hospitalised. I share the opinion, that caregivers don’t have enough education to care for elderly people who are serious ill or heavily dependent (Kovner et al. 2002, Huang & Wu 2008, Saxer et al. 2008). Adequate
knowledge is also needed to be able to identify early signs of various potential infections and diseases (Barakzai & Fraser 2008).

In quantitative research, caregivers expressed enough knowledge and skills for institutional elderly care. As we assume, this was because Slovenian state regulators give them a perception that their education and knowledge were satisfactory, to meet the residents’ needs. Interviews in qualitative analysis have shown that because of ever more dependent residents, who have higher requirements for nursing interventions, caregivers feel the need for more education. They would like to attend courses in gerontological nursing, although they have doubts about their possibilities to acquire higher education. This was the only case, where some contradictions between results of qualitative and quantitative analysis were found.

7.5 Main findings about quality of institutional elderly care

The interviews with staff members, residents and relatives in some issues sounded similar. All three parties agreed that quality of institutional elderly care should comprise good physical care, sound communication, friendly relationship, more time for treatment and adequate staff regulations. Some dispersion among these priorities was conducted, since residents pointed out sound communication in a manner of conversation and did not emphasize personal hygiene. Staff members expressed much more importance to appropriate number of staff and regulatory standards for nursing interventions. Also, some options and stimulations for further education should be available, if possible financially covered by nursing homes or governmental institutions. Relatives in majority were concerned about safety, food quality and about liquids to be at disposal. Quality of institutional elderly care was according to viewpoints summarized by meeting needs on time. While residents and relatives expected that, staff members only offered it, when spare time was available.

In the present study of quality institutional elderly care in Slovenia, four main findings were obtained. The first and most important finding defines quality of institutional elderly care from residents, relatives and nursing staffs’ points of view. The following three findings address important conclusions in this study to inform Slovenian public about existing situation in institutional elderly care. The main findings were as follows:
1. Quality of institutional elderly care should be carried out when needed and not by program or in spare time. The core formulation of quality institutional elderly care was introduced as meeting needs, when and if they emerge and on time, without necessary waiting. Nursing homes facilities and their staff should concern about hygiene, friendliness, conversation, company, nutrition and dwelling environment.

2. Recognition of physical maltreatment like rough handling was not reported. Nevertheless, neglect and poor psychosocial support may also result in poor quality of institutional elderly care.

3. Nursing staff members were not satisfied with working conditions and reported that they suffer from physical and mental fatigue. Because they were overworked and physically exhausted, they were not able to listen or talk to residents or ask them about their wishes.

4. Nursing home residences in Slovenia are behind standards, apartments and rooms are small, more-bedded, without private or ergonomically adjusted bathrooms and unsuitable furniture, being poorly arranged.

7.6 Future implications for quality of institutional elderly care

In accordance with obtained results some practical recommendations for improved care in Slovenian nursing homes have been proposed. My recommendations include guidelines on how to improve quality of institutional elderly care by implementing some identified deficiencies in care and does not include proposals for new working methods or organisational model changes. The proposals to meet quality institutional elderly care represent an alternative organisational approach, although partial implementation of some recognised deficiencies in care could also improve the quality of each individual Slovenian nursing home. Without results of proposals testing, it is difficult to predict if improvements in institutional elderly care are possible without legislative changes of staff regulations and standards of nursing interventions.

On the basis of the obtained study results the following suggestions for the development of quality institutional elderly care in Slovenian nursing homes can be presented:

1. Quality improvement of institutional elderly care should be resident-oriented and nursing interventions should be performed when residents ask for it and not by the program. Physical nursing care would be spread during whole day
and night which would most likely result in the decrease of the number of interventions. Morning nursing staff visits would become more like bilateral meetings, meant for communication and friendly conversation. In cases where nursing care is provided by demand, double-bedded rooms at maximum would be appreciated; otherwise roommates would be disturbed too much.

2. More time is needed to stimulate residents to practise self-care and remain autonomous for a longer period of time. In that manner residents would call for nursing staff only in case they need help. To support safe self-care, suitable dwelling environment needs to be established, because at present, frail elderly can not move around in the apartments. Also, residents should be introduced to meaningful activities more frequently.

3. Morning nursing care and lunch time at present task-oriented organisation of work represent most strenuous time for nursing staff and could be reduced by part-time employments, for 2–3 hours daily. For critical nursing interventions such as feeding, more time would be available and residents would not be endangered to choke. Part-time employees could also help in routine interventions like accompanying residents and making beds.

4. All kind of physical maltreatment should be reduced to a minimum, like protection of intimacy and privacy. At present situation this is difficult to achieve since Slovenian nursing homes have mainly two-bedded or more-bedded apartments and folding screens are not allowed, due to higher risk of infections.

5. Regarding dwelling environment, my proposal for the future is to build more single-bedded and double-bedded apartments. Also, newly built facilities should have modern equipped bathrooms, installations of electronic equipment should allow easy call calls to staff members for help or when the elderly person is in distress. Hospitality could be increased by providing small swimming pools and gyms for leisure activities (exercises), equipped according to the needs of residents.

6. The educational level of staff members in nursing homes should be adjusted to that in Slovenian hospitals, since nursing homes already offer extended medical treatment. This kind of treatment should lead to higher financial compensation from the side of insurance companies. This would also mean higher financial basis to employ appropriately educated nursing staff, equivalent to other developed European countries.
7. The obtained findings could be used to develop themes and subjects for postgraduate gerontological nursing care study programmes in Slovenia. In addition, the findings could be used for seminars organised by the Slovenian nursing section for social institutions, to promote and present institutional elderly care to the broader public.
8 Conclusions

1. Study findings indicate that quality of institutional elderly care, in general, should be carried out when needed and not by program or in time available. In that manner the core formulation of quality institutional elderly care is introduced as meeting needs, when and if they emerge and on time, without necessary waiting. If nursing interventions are reduced, residents would be obligated for self-care to preserve their autonomy and staff members would have more time available for social or leisure activities, such as conversations or promenades and to introduce residents to meaningful activities. Residents and relatives would play much more important role collaborating in care/help by demand.

2. It was also found important to give closer attention to improvement of dwelling environment since apartments were uncomfortable with inadequate furniture and without private or ergonomically adjusted bathrooms. Due to more-bedded apartments it is difficult to have privacy and to experience home away from home. Such dwelling environment does not provide safety and intimacy cannot be guarantied. Present dwelling environment in Slovenia does not contribute to quality of institutional elderly care. Nevertheless, this problem may be diminished in near future, since several new nursing homes are at the moment under construction, to take advantage of the new market opportunity to care for elderly people.

3. Regarding recognition of maltreatment to residents nursing staff primarily witnessed untidy apartments, violation of intimacy and privacy. In some cases they also noticed that residents were not properly fed, which was probably result of tight work schedule. Low staff levels may contribute to neglect of duties since residents were not frequently accompanied outside to take promenades. Numerical inadequacy of staff members in connection to low salaries may also contribute to job dissatisfaction and therefore to reduced quality. Health care professionals working in institutional elderly care should become proactive and influence the respect shown for gerontological care by promotion of their work in public media, to draw attention of state legislature to make conditions favourable.

4. The obtained findings were not surprising, study participants expressed already known issues about institutional elderly care, but together they pointed out what should quality institutional elderly care primarily consist of. The
findings provide a holistic view of institutional elderly care in Slovenia and show to which factors importance should be added when improving quality is at stake. To some extent the findings could be used for international public also, although Slovenian nursing homes suffer from unpleasant dwelling environment due to small more-bedded apartments. An additional issue that may significantly impact comparison to international level is Slovenian staff to resident ratio where Slovenia lags behind other European countries. Many specific terms have been extracted during the analysis process that may contribute to development of gerontological nursing care rationale in Slovenia. This study and methods used may also be considered as an example or basis for further research, since Slovenian institutional elderly care phenomenon was not researched comprehensively in the past.

**Challenges for future research.** On the basis of the obtained research findings the following challenges for future research are suggested:

1. Some pilot studies are needed to determine if organisation of work by demand would bring relief to nursing staff, more satisfaction to all parties involved in institutional elderly care and more time for critical interventions, such as feeding.

2. Sample population in this study was collected from the north-eastern part of Slovenia and capital town Ljubljana. Therefore it would be interesting to conduct similar research on a sample from other Slovenian regions.

3. To examine by semi-structured interviews which nursing interventions provide most inconvenience to residents. In this study we did not used instrument to measure residents’ satisfaction with nursing care provision in more detail.

4. To examine how relatives desire or could participate in institutional elderly care provision. In this study some relatives expressed that they already participate or would like to participate in elderly care provision. Therefore, it would be interesting to investigate in more detail how this could be realized from their point of view.
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Appendices
### Appendix 1. Research questions

Research questions in the qualitative study:

<table>
<thead>
<tr>
<th>Point of view</th>
<th>Research question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents:</td>
<td>1. How does the residents’ dwelling in nursing home define the quality of institutional elderly care?</td>
</tr>
<tr>
<td></td>
<td>2. What kind of institutional elderly care is being offered to nursing home residents?</td>
</tr>
<tr>
<td>Relatives:</td>
<td>1. How do the relatives visiting residents in nursing home define the quality of institutional elderly care?</td>
</tr>
<tr>
<td></td>
<td>2. What kind of institutional elderly care is being offered to nursing home residents?</td>
</tr>
<tr>
<td>Nursing staff members:</td>
<td>1. How do the nursing home staff members define the quality of institutional elderly care?</td>
</tr>
<tr>
<td></td>
<td>2. What kind of institutional elderly care is being offered to nursing home residents?</td>
</tr>
</tbody>
</table>
Appendix 2. Questionnaire for nursing staff members

1. Address of your social institution; .................................

2. Institution status;
   a) public social institution
   b) private social institution with concession

3. Ward in which you work;
   a) hotel and/or residence ward
   b) department for dementia
   c) nursing ward

4. Your age: ..............................................

5. Sex;
   a) female
   b) male

6. Education;
   a) caregiver
   b) nursing assistant
   c) registered nurse
   d) registered nurse with university degree

7. Your working experiences (how many years, months do you work in nursing);
   a) Years .........
   b) Months ..... 

8. Your working experiences in present job;
   a) Years .........
   b) Months .......

Assistance of nursing staff according to individual needs of residents through nursing interventions for the satisfaction of physical, psychological and social needs.

9. Do you think that the residents on your ward have an adequate feeling of safety;
   always    often    sometimes    seldom    never
   5        4           3           2           1

10. How frequently can you immediately respond to the resident call;
    always    often    sometimes    seldom    never
     5        4           3           2           1

11. Do you think that you are able to give to your resident the possibility of self-care;
    always    often    sometimes    seldom    never
     5        4           3           2           1

12. Do you have time for listening to your resident (about his troubles, doubts, sadness);
    always    often    sometimes    seldom    never
     5        4           3           2           1
13. How often do you pay your attention to the realization of tranquillized touch with your resident;
always often sometimes seldom never
5 4 3 2 1

14. How often do you help your residents in giving them the possibility of expressing their truth, experiences and excitement;
always often sometimes seldom never
5 4 3 2 1

15. How often do you help your individual residents, who need help at drinking and eating;
always often sometimes seldom never
5 4 3 2 1

16. How often do you allow your resident to do his/her hygiene and dress him/herself with your presence;
always often sometimes seldom never
5 4 3 2 1

17. How often do you cooperate with your residents who need or would like to have your company when they want to go to the toilet (WC);
always often sometimes seldom never
5 4 3 2 1

18. How often can you guarantee the company for your resident having troubles with moving;
always often sometimes seldom never
5 4 3 2 1

19. How often can you guarantee the suitable temperature and moisture in resident room;
always often sometimes seldom never
5 4 3 2 1

20. How often do you succeed in establishing peace before going to sleep on the ward;
always often sometimes seldom never
5 4 3 2 1

21. How often do you help your resident in expressing his/her sexual needs;
always often sometimes seldom never
5 4 3 2 1

22. Do your residents have the possibility of getting into contact with their relatives and friends (via phone, letter, visiting time, visiting room);
always often sometimes seldom never
5 4 3 2 1
**Adequacy of nursing staff’s knowledge and skills to response patient's needs and importance of those nursing areas.**

In connection with this questionnaire I would like to ask you to give me two answers for the following questions:

- the first column – do you think that you have enough professional knowledge,
- the second column – how important is this for your field of nursing.

23. Do you think that you have enough knowledge and skills to offer your residents safe nursing:
   - A. Enough (knowledge)
   - B. Important/Significance
   - 4. enough
   - 3. not enough
   - 2. poor
   - 1. not at all

24. Do you think that you have enough knowledge for giving food and drink to your resident:
   - A. Enough (knowledge)
   - B. Important/Significance
   - 4. enough
   - 3. not enough
   - 2. poor
   - 1. not at all

25. Do you have enough knowledge that you can give to your resident independent hygiene and dressing:
   - A. Enough (knowledge)
   - B. Important/Significance
   - 4. enough
   - 3. not enough
   - 2. poor
   - 1. not at all

26. Do you have enough knowledge that you can help your resident who have respiratory troubles:
   - A. Enough (knowledge)
   - B. Important/Significance
   - 4. enough
   - 3. not enough
   - 2. poor
   - 1. not at all

27. Do you have enough knowledge that you can help your resident in connection with his/her elimination and (excrementation):
   - A. Enough (knowledge)
   - B. Important/Significance
   - 4. enough
   - 3. not enough
   - 2. poor
   - 1. not at all
28. Do you think that you have enough knowledge for giving help to the individual resident in moving;
   A. Enough (knowledge)   B. Important/Significance
   4. enough               4. very important
   3. not enough           3. fairly important
   2. poor                 2. a little important
   1. not at all           1. not at all

29. Do you have enough knowledge for giving help to the individual resident who has troubles with resting and sleeping;
   A. Enough (knowledge)   B. Important/Significance
   4. enough               4. very important
   3. not enough           3. fairly important
   2. poor                 2. a little important
   1. not at all           1. not at all

30. Do you have enough knowledge that you are able to dress your resident regarding his troubles in order to keep his normal body temperature;
   A. Enough (knowledge)   B. Important/Significance
   4. enough               4. very important
   3. not enough           3. fairly important
   2. poor                 2. a little important
   1. not at all           1. not at all

31. Do you have enough knowledge for a successful communication with the residents relatives and people who are important for him/her;
   A. Enough (knowledge)   B. Important/Significance
   4. enough               4. very important
   3. not enough           3. fairly important
   2. poor                 2. a little important
   1. not at all           1. not at all

32. Do you have enough knowledge for helping the individual resident to express his/her sexual needs;
   A. Enough (knowledge)   B. Important/Significance
   4. enough               4. very important
   3. not enough           3. fairly important
   2. poor                 2. a little important
   1. not at all           1. not at all

33. How much professional knowledge do you have for recognizing the expression of pain relieving of your residents;
   A. Enough (knowledge)   B. Important/Significance
   4. enough               4. very important
   3. not enough           3. fairly important
   2. poor                 2. a little important
   1. not at all           1. not at all
34. How much knowledge do you have for giving help or advice in solving more difficult problems of the residents and how much important is this for you;
A. Enough (knowledge) B. Important/Significance
4. enough 4. very important
3. not enough 3. fairly important
2. poor 2. a little important
1. not at all 1. not at all

35. Do you think that you have enough knowledge for working with the resident, who is in terminal phase and how much important is this for you;
A. Enough (knowledge) B. Important/Significance
4. enough 4. very important
3. not enough 3. fairly important
2. poor 2. a little important
1. not at all 1. not at all

36. How much knowledge do you have for confronting with the death of the residents and how much important is this for you;
A. Enough (knowledge) B. Important/Significance
4. enough 4. very important
3. not enough 3. fairly important
2. poor 2. a little important
1. not at all 1. not at all

How often can you recognize the cases of inappropriate behaviour (maltreatment) to the residents? Please, give the answer to one of the presented possibilities.

37. Are the residents on your ward exposed to any kinds of inappropriate relationship;
   Daily Once a week At least once a month Seldom Never I can't say
   1 2 3 4 5 6

38. How often does it happen that the residents on the ward are left alone (without necessary control);
   Daily Once a week At least once a month Seldom Never I can't say
   1 2 3 4 5 6

39. How often does it happen that the resident cannot get the help, for which he/she has asked;
   Daily Once a week At least once a month Seldom Never I can't say
   1 2 3 4 5 6

40. How often can you recognize that the residents are kept in wet pads unnecessarily long;
   Daily Once a week At least once a month Seldom Never I can't say
   1 2 3 4 5 6

41. How often does it happen that the residents do not have the appropriate hygiene;
   Daily Once a week At least once a month Seldom Never I can't say
   1 2 3 4 5 6

42. How often does it happen that the residents do not have enough quantity to drink;
   Daily Once a week At least once a month Seldom Never I can't say
   1 2 3 4 5 6
43. How often does it happen that the residents in appropriately or deficiently dressed;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

44. How often does it happen that the residents do not get enough quantity of food (too much or too little);
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

45. How often does it happen that the residents are not appropriately fed (too fast, too cold or too hot food);
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

46. How often can you recognize the untidy dwelling place of the resident;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

47. How often does it happen that resident does not get the necessary therapy (dose, time);
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

48. How often can you recognize that the residents are exposed to unnecessary pains;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

49. How often you are not able to accompany the resident at moving outside the room because of your overload;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

Psychic maltreatment

50. How often can you recognize humiliating – vulgar relationship when speaking to residents;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

51. How often can you recognize the presence of an angry and loud vice when speaking to an individual resident;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

52. How often can you recognize the neglection of wishes, expressed by residents;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

53. How often can you recognize making fools out of the residents;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

54. How often can you recognize the violation of intimacy;
   | Daily | Once a week | At least once a month | Seldom | Never | I can't say |
   | 1     | 2           | 3                     | 4      | 5      | 6          |

160
55. How often can you recognize the violation of privacy (being aware that the resident room is also his/her home);

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

Physical maltreatment

56. How often do you recognize rough handling with the residents;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

57. How often can you recognize that the nursing care is realized inappropriately according to the place or situation;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

58. How often can you recognize that the residents are unnecessarily tied to prevent movement;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

59. How often can you recognize that the residents are too long in inappropriate position (lying in bed, seating on wheel-chair);

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

The following questions are related to the satisfaction of nursing staff. Please, express your opinion in one of five possibilities (daily, once a week or more often, once a month or more often, less frequently and never).

60. How often do you feel physically tired:

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

61. How often do you feel psychically exhausted;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

62. How often there is no adequate number of nursing staff in the ward;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

63. How often does it happen that you have to be too much responsible for the residents;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

64. How often can you recognize the inappropriate relationship among the members of the nursing staff;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6

65. How often can you get real understanding and help of the leading staff;

Daily  Once a week  At least once a month  Seldom  Never  I can't say
1  2  3  4  5  6
66. How frequently can you get the possibility for professional education in elderly care (gerontological nursing);
- Daily
- Once a week
- At least once a month
- Seldom
- Never
- I can't say

1 2 3 4 5 6

67. How often can you rely on help of the nursing staff when you get into troubles;
- Daily
- Once a week
- At least once a month
- Seldom
- Never
- I can't say

1 2 3 4 5 6

According to your opinion on gerontological nursing care in the future. Please answer one of five possibilities (excellent, very good, good, sufficient, insufficient).

68. Your opinion on adequacy of salary in elderly care;
- Daily
- Once a week
- At least once a month
- Seldom
- Never
- I can't say

1 2 3 4 5 6

69. In which direction should gerontological nursing (elderly care) be directed;
- Daily
- Once a week
- At least once a month
- Seldom
- Never
- I can't say

1 2 3 4 5 6
Appendix 3. Conceptual classification of interview data

Content analysis method was conducted separately for each point of view (residents, relatives and nursing staff) regarding two research questions about quality of institutional elderly care and elderly care offered in nursing homes. For each point of view: codes, subcategories and main category were formulated. Each code was supported by authentic citations by interview code and time notation (for example, ws13-4:20 indicates interview code: ws13 and citation: 4 minutes and 20 seconds, after start of the interview)

ATTENTIVE CARE

Good physical care

Tidiness
- Washing
  ws13-4:20;
- Attention and precision
  ws57-1:40;
- Washing in bed; Nursing care in bed
  ws13-1:10; ws54-2:35;

Care of skin
- Self-care of skin
  ws57-2:00;
- Care of skin;
  ws45-2:00; ws57-4:40;

Massage
- Getting massage being ill; getting massage to feel better; getting massage to prevent pain
  ws46-2:15; Ws47-1:35; ws54-1:20;

Quality food
- Food with fewer conservatives
  Ws30-4:40;
- Option to change menu
  Ws10-0:45;

Homeliness

Safety feelings
- Getting help by pressing button
  Ws47-3:45;
- Help at night
  Ws54-8:30;
- Physical support at motion; technical support
  Ws07-5:30; ws54-5:30;
Home-like feelings
   Living like at home; dwelling like at home
   Ws12-01:10; Ws10-1:43;
   Keeping things from home
   Ws12-18:00;

Active life
Social activities
   Leisure activities
   Ws47-4:15;
   Physical exercise
   Ws25-4:10;
Sociability
   Finding company; being social
   Ws12-8:00; Ws25-3:05;
Organisation of social events
   Visiting social events
   Ws12-14:40;
   Family happening
   Ws12-3:00;

Caring
Good communication
   Staff interest about residents
   Ws07-0:20; Ws49-1:40;
   Residents assemblies
   Ws25-3:50;
   Hiding nervousness
   Ws12-10:30;
   Explanation
   Ws07-1:10;
Human emotional relationship
   Warmth
   Ws10-1:26; Ws54-9:10;
   Psychological knowledge
   Ws10-3:08;
   Human note
   Ws10-1:05;
   Respect
   Ws11-1:05; Ws12-10:15;
Friendliness
Good mood, kind behaviour, happy people
ws11-0:40; ws28-2:20; ws46-2:30;
Decent and kind relations; kindness
ws46-1:00; ws49-0:50;

Help
Escort
Ws47-2:00;
Frequent visits
ws13-0:50;
Satisfying needs
ws49-1:58;

Enough time
Time
ws10-0:25; ws10-4:20; ws46-1:45;
Personall devotion
ws12-9:50; ws07-4:40;
Staff reluctance
ws12-2:50; ws 57-1:20;

Sufficient professional staff
Competences of head nurses
Getting chance to visit doctor,
ws25-1:40; ws25-2:20;
Arranging voluntary help
ws12-18:43;
Verified staff
ws12-17:20;

Enough nursing staff
No waiting time; no hastiness; no running around
ws11-4:25; ws29-2:40; ws47-3:15;
Strict working discipline; taking care of resident therapy
ws30-3:34; ws30-0:30; ws54-3:30;

NEGLECT OF CARE
Insufficiency of nursing staff
Lack of staff
Asking for everything
ws13-5:50;
More staff like in past; Only few staff; bad attention
ws11-7:11; ws25-4:53; ws10-1:57; ws11-4:30; ws12-2:20;
Waiting
ws12-9:25; ws13-6:00;
Hastiness
  Negligent care
  Ws13-3:30;
  Hurry
  Ws48-4:10;

Unprofessional communication
Insufficient communication
  Improper explanation
  ws11-5:36;
  Staff ability to communicate oscillates
  Ws28-0:50;
  Unconsidered complains
  ws48-3:40;

Unkind behaviour
  No kind words
  Ws47-4:45;
  Bad mood
  Ws12-8:20

Unwillingness to listen
  Unconsidered remarks or desires
  Ws49-2:50
  Silence
  Ws47-5:14

Maltreatment
Fast care
  Five minutes care
  Ws13-4:12; Ws54-6:20;
  Dressing being wet
  Ws57-3:10;

Low protection of intimacy
  Room doors staying open
  Ws07-3:00;
  Small more-bedded dwelling
  Ws11-7:43; Ws54-7:15;

Fast feeding
  Fast swallowing; staying hungry
  Ws54-5:56; Ws10-0:44;
  Hot meals
  Ws47-5:52;
OPTIMAL CUSTODY

Human and individual approach

Good communication
   Expectations
   Personal contact
   Communication knowledge

Human relationship
   Empathy
   Touch
   Observation skills
   Preserving human dignity

Familiarity feelings
   Having company
   Home-like relationship; transfer

Individual approach
   Asking about wishes; mutual perception
   Acclimatisation
   “Only guest” approach

Humour
   Comedy
   Fun and laughter

Good physical care
   Personal hygiene
   Considerations of circumstances; attention
Basic care
ws20-0:45; ws36-1:45; ws52-1:10;
Quality food
Adequate portions
ws34-8:40;
Liquids at hand
ws36-1:40; ws06-0:20;
Getting medicine at prescribed time
Safe environment
ws21-0:30;
Handling medicine
ws20-3:49;
Comfortable and safe environment
Clean environment
Clean environment
ws38-3:41; ws34-5:35;
Comfortable furniture
Preventing injuries
ws52-2:30;
Comfort
ws21-1:55;
Rearrangements
ws22-2:45;
Physical safety
Protection; control
ws22-3:34; ws23-3:00; ws52-2:50;
Guarantee of safety
ws36-5:45;
Social activities
Organisation of social events
Memberships
ws38-5:11;
Generations’ meetings
ws56-4:11;
Social activities
Exercising
ws20-4:47;
Backing
ws38-5:23;
**Sufficient nursing staff**

No waiting time
- Help on time
  - ws36-0:40
- Escorts
  - ws32-4:47

Enough nursing staff
- Proper treatment; documentation
  - ws06-2:00; ws56-0:40; ws06-1:35;
- Numerical adequacy of staff members
  - ws33-1:52; ws31-0:35; ws06-1:04;
- Fast feeding
  - ws52-3:00;

Professional staff
- Professional and tactful communications
  - ws56-3:20;
- Inadequate hiring
  - ws34-7:35;
- Predispositions for elderly care; higher education
  - ws52-8:22; ws32-3:40;
- Doctors’ presence
  - ws34-2:09;

**DEFICIENT CARE**

**Insufficiency of nursing staff**

Low-educated staff
- Recognising health and safety risks
  - ws36-6:10; ws34-3:30;
- Visiting seminars
  - ws34-1:48;

Unmotivated staff
- Inspections; need for additional help;
  - ws34-10:30; ws32-4:56; ws52-5:40; ws06-0:40;
- Responsible medications handling
  - ws23-1:20;

Routine work
- No conversation and no motivation
  - ws56-2:00; ws52-8:20;
- Providing orientation
  - ws38-2:00;
Bad documentation
Detection of health risks
ws33-5:40
Documentation of injuries or incidents
ws20-4:12

Neglect of care
Insufficient hygiene
Mouth hygiene
ws52-9:00;
Infrequent showers
ws56-1:20;
Clean clothing
ws22-2:58;

Lack of physical activities
Promenades
ws34-5:10; ws31-3:00;
Being closed within four walls
ws34-6:00; ws34-4:30;

Fast feeding
Improper feeding
ws06-6:40; ws20-5:39;
Improper portions of food; unhealthy food
ws32-7:50; ws23-1:50; ws32-4:20; ws34-8:25;

Devaluation of human dignity
Human dignity
ws36-7:40;
Intimacy care
ws34-9:11;

Uncomfortable environment
Uncomfortable dwelling
Small dwellings
ws38-4:35;
Improper equipped bathrooms
ws22-4:11;

Deficient cleaning
Infrequent cleaning
ws22-3:58;
Stains and dust on the floor
ws52-9:21;
**HOLISTIC APPROACH**

**Individual approach**

Good communication
- Nonverbal virtues
  - ws35-2:10; ws50-1:40;
- Need to explain treatments
  - ws44-2:30;
- Communication with relatives
  - ws24-1:50;

High-educated staff
- Coping with age and illnesses
  - ws15-5:20; ws16-1:00; ws42-3:00;
- More knowledge about treatments
  - ws35-7:33; ws37-3:05; ws58-2:40;
- Ability to orient oneself
  - ws26-4:00; ws39-2:40;

Intimacy environment
- Adequate dwellings
  - ws58-2:20; ws39-2:20;
- Legislation
  - ws50-5:55;
- Protecting intimacy
  - ws17-2:00; ws58-2:30;

Homeliness
- Adjustments; considering habits
  - ws24-1:25; ws58-2:00;
- Family-like atmosphere
  - ws50-3:50; ws18-2:20;

**Working conditions**

More nursing staff
- Inadequate legislative staff regulations
  - ws16-2:00; ws37-0:30; ws58-4:00;
- Need for more devotion; less administration work;
  - ws44-0:50; ws18-3:44; ws35-1:20; ws39-1:40; ws42-0:40;
- Nursing staff satisfaction
  - ws24-2:10;

Good organisation of work
- Good organisation of work; teamwork
  - ws53-2:00; ws24-2:10; ws50-10:30; ws24-0:40; ws58-1:20; ws58-2:50;
Satisfying needs

Residents’ satisfaction

   Experiencing satisfaction
   ws27-0:30; ws17-2:15; ws26-0:40; ws42-1:50;
   Fulfilling wishes; warmth
   ws39-0:50; ws35-4:10; ws53-1:20;

Empathy

   Empathy; observations; recognition of problems
   ws50-0:15; ws15-6:40; ws24-4:40; ws58-1:40; ws15-2:10;

Physical needs

Stimulated autonomy

   Stimulation; occupation; self-care
   ws50-11:10; ws18-2:40; ws50-2:30;
   Gatherings
   ws35-3:10; ws50-9:40;

Good nursing care

   Thorough nursing care and custody
   ws26-2:45; ws35-3:50; ws18-0:40; ws26-2:15; ws27-4:00; ws44-3:40;
   ws50-0:50; ws50-8:00;
   Preconditions for good nursing care
   ws53-0:40; ws17-0:40; ws16-3:30; ws16-4:50; ws26-3:00;

ROUTINE CARE

Nursing staff regulation

Not enough staff

   Narrow staff regulations
   ws24-3:10; ws39-5:00; ws18-1:15; ws37-2:00;
   Physical and mental exhaustion
   ws26-3:30; ws35-5:30; ws37-5:00;

Unmotivated staff

   Motivation in decline
   ws16-2:30; ws16-5:05; ws16-1:30;
   Staff shortage
   ws35-6:00;

Inadequate administration

Unsuitable organisation of work

   Part time help
   ws18-5:34; ws24-4:25;
   Difficulties finding adequate nursing staff
   ws53-4:00; ws15-7:10;
Delaying with ward change of health demanding residents
ws15-5:00;

Deficient documentation
Lack of time
ws39-5:55;
Poor technical equipment
ws27-6:51;

Time shortage
Hastiness
Impersonal nursing care
ws50-4:30; ws27-5:25; ws50-5:40;
Lack of time
ws50-4:50; ws58-6:00;

Neglect of care
Denying ability to self-care
ws50-2:40;
Fighting with time
ws42-4:45;
Simplifications
ws53-2:40;

Insufficient communication
Need for more communication skills; getting closer
ws27-6:08; ws18-4:00; ws35-7:50;
Internal educations
ws35-8:40; ws35-6:40;

Devaluation of human dignity
Pretending interest
ws51-1:45;
Interrupting conversations
ws44-5:30; ws50-5:52;
Appendix 4. Factor analysis of instruments contract validity

For each instrument: communalities, total variance explained and rotated factor matrix is presented. Cells with highest loadings in rotated factor matrix are shaded. Crossed cells present items which did not loaded according to expectations.

1. The instrument measuring how well the residents’ individual needs are met

Table app4.1: Communalities

<table>
<thead>
<tr>
<th>Item</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>The elderly having adequate feeling of safety P</td>
<td>.230</td>
</tr>
<tr>
<td>Respond to the elderly person’s call P</td>
<td>.337</td>
</tr>
<tr>
<td>Give possibility of self-care P</td>
<td>.439</td>
</tr>
<tr>
<td>Time for listening P</td>
<td>.421</td>
</tr>
<tr>
<td>Realization of tranquillizing touch P</td>
<td>.308</td>
</tr>
<tr>
<td>Expression of thoughts, experiences and emotions P</td>
<td>.353</td>
</tr>
<tr>
<td>Help at drinking and eating P</td>
<td>.247</td>
</tr>
<tr>
<td>Allow hygiene and dressing with your presence P</td>
<td>.375</td>
</tr>
<tr>
<td>Cooperate to accompany the elderly to the toilet P</td>
<td>.133</td>
</tr>
<tr>
<td>Accompany the elderly having troubles with moving P</td>
<td>.256</td>
</tr>
<tr>
<td>Maintenance of suitable temperature and moisture in the room P</td>
<td>.475</td>
</tr>
<tr>
<td>Establishing peace before going to sleep P</td>
<td>.337</td>
</tr>
<tr>
<td>Expression of sexual needs P</td>
<td>.152</td>
</tr>
<tr>
<td>Contacts with relatives and friends P</td>
<td>.131</td>
</tr>
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</table>

Extraction Method: Principal Axis Factoring.

Table app4.2: Total Variance Explained

<table>
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<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
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<tr>
<td></td>
<td>Initial</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>% of Variance</td>
<td>% of Variance</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
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<td>1.293</td>
<td>9.234</td>
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<td>1.201</td>
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<td>4.731</td>
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<td>0.643</td>
<td>4.594</td>
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<td>2.397</td>
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</table>

Extraction Method: Principal Axis Factoring.
Table app4.3: Rotated Factor Matrix(a)

<table>
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<tr>
<th>Factor</th>
<th>1 PS</th>
<th>2 PS</th>
<th>3 P</th>
<th>4 PS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The elderly having adequate feeling of safety PS</td>
<td>.342</td>
<td>.276</td>
<td>.163</td>
<td>.120</td>
</tr>
<tr>
<td>Respond to the elderly person’s call PS</td>
<td>.451</td>
<td>.257</td>
<td>.150</td>
<td>.234</td>
</tr>
<tr>
<td>Give possibility of self-care PS</td>
<td>.394</td>
<td>.382</td>
<td>.062</td>
<td>.531</td>
</tr>
<tr>
<td>Time for listening PS</td>
<td>.386</td>
<td>.547</td>
<td>.076</td>
<td>.190</td>
</tr>
<tr>
<td>Realization of tranquilizing touch PS</td>
<td>.006</td>
<td>.636</td>
<td>.019</td>
<td>.067</td>
</tr>
<tr>
<td>Expression of thoughts, experiences and emotions PS</td>
<td>.089</td>
<td>.655</td>
<td>.125</td>
<td>.072</td>
</tr>
<tr>
<td>Help at drinking and eating P</td>
<td>.415</td>
<td>-1.142</td>
<td>.406</td>
<td>.075</td>
</tr>
<tr>
<td>Allow hygiene and dressing with your presence PS</td>
<td>.304</td>
<td>.404</td>
<td>.183</td>
<td>.338</td>
</tr>
<tr>
<td>Cooperate to accompany the elderly to the toilet P</td>
<td>.005</td>
<td>.125</td>
<td>.479</td>
<td>-1.109</td>
</tr>
<tr>
<td>Accompany the elderly having troubles with moving P</td>
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<td>.168</td>
<td>.525</td>
<td>.234</td>
</tr>
<tr>
<td>Maintenance of suitable temperature and moisture in the room P</td>
<td>.829</td>
<td>.260</td>
<td>-1.119</td>
<td>-.040</td>
</tr>
<tr>
<td>Establishing peace before going to sleep PS</td>
<td>.629</td>
<td>-.009</td>
<td>.184</td>
<td>-.055</td>
</tr>
<tr>
<td>Expression of sexual needs PS</td>
<td>.105</td>
<td>.350</td>
<td>.158</td>
<td>-.207</td>
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<td>Contacts with relatives and friends PS</td>
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<td>.008</td>
<td>.395</td>
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Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 6 iterations.
PS Psychosocial need
P Physical need

2. The instrument measuring knowledge and skills to meet the residents’ needs

Table app4.4: Communalities

<table>
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<th>Item</th>
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<td>Offer safe nursing P</td>
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<tr>
<td>Give food and drink P</td>
<td>.419</td>
</tr>
<tr>
<td>Give independent hygiene and dressing P</td>
<td>.160</td>
</tr>
<tr>
<td>Help by respiratory troubles P</td>
<td>.370</td>
</tr>
<tr>
<td>Help in connection with elimination and (excrementation) P</td>
<td>.357</td>
</tr>
<tr>
<td>Help individual resident in moving P</td>
<td>.456</td>
</tr>
<tr>
<td>Help by troubles with resting and sleeping P</td>
<td>.507</td>
</tr>
<tr>
<td>Appropriate dress in order to keep normal body temperature P</td>
<td>.196</td>
</tr>
<tr>
<td>Communicate with the relatives and friends PS</td>
<td>.416</td>
</tr>
<tr>
<td>Help express sexual needs PS</td>
<td>.374</td>
</tr>
<tr>
<td>Recognise of the expression of pain PS</td>
<td>.460</td>
</tr>
<tr>
<td>Help or advice in solving more difficult problems PS</td>
<td>.480</td>
</tr>
<tr>
<td>Work with the resident in terminal phase PS</td>
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</tr>
<tr>
<td>Confront with the death of the residents PS</td>
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Extraction Method: Principal Axis Factoring.
### Table app4.5: Total Variance Explained

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<th>Rotation Sums of Squared Loadings</th>
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</thead>
<tbody>
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<td></td>
<td>Total</td>
<td>% of Variance</td>
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<td>4.537</td>
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<td>11.406</td>
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<td>1.178</td>
<td>8.413</td>
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<td>.759</td>
<td>5.424</td>
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<td>.606</td>
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<td>.502</td>
<td>3.717</td>
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<tr>
<td>10</td>
<td>.506</td>
<td>3.613</td>
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<tr>
<td>11</td>
<td>.463</td>
<td>3.306</td>
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<tr>
<td>12</td>
<td>.368</td>
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<tr>
<td>13</td>
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Extraction Method: Principal Axis Factoring.

### Table app4.6: Rotated Factor Matrix(a)

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<th>2 P</th>
<th>3 P</th>
<th>4 PS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer safe nursing P</td>
<td></td>
<td>.121</td>
<td>.081</td>
<td>.399</td>
<td>.250</td>
</tr>
<tr>
<td>Give food and drink P</td>
<td></td>
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<td>.150</td>
<td>.644</td>
<td>-.044</td>
</tr>
<tr>
<td>Give independent hygiene and dressing P</td>
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<td>-.057</td>
<td>.267</td>
<td>.001</td>
<td>.033</td>
</tr>
<tr>
<td>Help by respiratory troubles P</td>
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<td>.298</td>
<td>.341</td>
<td>.290</td>
<td>.221</td>
</tr>
<tr>
<td>Help in connection with elimination and (excrementation) P</td>
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<td>.031</td>
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<td>.069</td>
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<tr>
<td>Help individual resident in moving P</td>
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<td>.793</td>
<td>.102</td>
<td>.063</td>
</tr>
<tr>
<td>Help by troubles with resting and sleeping P</td>
<td></td>
<td>.369</td>
<td>.576</td>
<td>.054</td>
<td>.309</td>
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<tr>
<td>Appropriate dress in order to keep normal body temperature P</td>
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<td>.295</td>
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<td>.025</td>
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<tr>
<td>Help express sexual needs PS</td>
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<td>.177</td>
<td>.329</td>
<td>.272</td>
<td>.348</td>
</tr>
<tr>
<td>Recognise of the expression of pain PS</td>
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<td>.408</td>
<td>.138</td>
<td>.395</td>
</tr>
<tr>
<td>Help or advice in solving more difficult problems PS</td>
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<td>.526</td>
<td>.219</td>
<td>.139</td>
<td>.421</td>
</tr>
<tr>
<td>Work with the resident in terminal phase PS</td>
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<td>.592</td>
<td>.280</td>
<td>.160</td>
<td>.297</td>
</tr>
<tr>
<td>Confront with the death of the residents PS</td>
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Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 6 iterations.
PS Psychosocial need
P Physical need
3. The instrument measuring how important nursing staff considers helping residents to meet their needs

### Table app4.7: Communalities

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<th>Factor</th>
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<td>Offer safe nursing P</td>
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<td>Give food and drink P</td>
<td>451</td>
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<tr>
<td>Give independent hygiene and dressing P</td>
<td>478</td>
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</tr>
<tr>
<td>Help by respiratory troubles P</td>
<td>527</td>
<td></td>
</tr>
<tr>
<td>Help in connection with elimination and (excrementation) P</td>
<td>357</td>
<td></td>
</tr>
<tr>
<td>Help individual resident in moving P</td>
<td>597</td>
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</tr>
<tr>
<td>Help by troubles with resting and sleeping P</td>
<td>670</td>
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<tr>
<td>Appropriate dress in order to keep normal body temperature P</td>
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<tr>
<td>Communicate with the relatives and friends PS</td>
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<tr>
<td>Help express sexual needs PS</td>
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<tr>
<td>Recognise of the expression of pain PS</td>
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</tr>
<tr>
<td>Help or advice in solving more difficult problems PS</td>
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<td>Work with the resident in terminal phase PS</td>
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Extraction Method: Principal Axis Factoring.

### Table app4.8: Total Variance Explained

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Extraction Method: Principal Axis Factoring.
Table app4.9: Rotated Factor Matrix(a)

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</thead>
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<td>.242</td>
<td>.448</td>
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<tr>
<td>Give food and drink P</td>
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<td>.088</td>
<td>.521</td>
</tr>
<tr>
<td>Give independent hygiene and dressing P</td>
<td>-.031</td>
<td>.571</td>
<td>-.069</td>
<td>.437</td>
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<tr>
<td>Help by respiratory troubles P</td>
<td>-.146</td>
<td>-.081</td>
<td>.026</td>
<td>.030</td>
</tr>
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<td>Help in connection with elimination and (excretion) P</td>
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<td>-.003</td>
<td>.481</td>
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<td>.065</td>
<td>.121</td>
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<td>Help by troubles with resting and sleeping P</td>
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<td>.504</td>
<td>.230</td>
<td>.152</td>
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<tr>
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<td>.541</td>
<td>.188</td>
<td>.143</td>
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<tr>
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<td>.151</td>
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<tr>
<td>Help express sexual needs PS</td>
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<td>.266</td>
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<td>.037</td>
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<tr>
<td>Recognise of the expression of pain PS</td>
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<td>.203</td>
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<tr>
<td>Help or advice in solving more difficult problems PS</td>
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<td>.157</td>
<td>.368</td>
<td>.248</td>
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<tr>
<td>Work with the resident in terminal phase PS</td>
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<td>.556</td>
<td>.043</td>
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<tr>
<td>Confront with the death of the residents PS</td>
<td>.060</td>
<td>.070</td>
<td>.447</td>
<td>.481</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
(a) Rotation converged in 12 iterations.
PS  Psychosocial need
P  Physical need
4. The instrument measuring recognition of maltreatment to residents

**Table app4.10: Communalities**

| Are the residents on your ward exposed to any kinds of inappropriate relationship | .351 |
| How often does it happen that the residents on the ward are left alone (without necessary control) | .465 |
| How often does it happen that the resident cannot get the help, for which he/she has asked | .429 |
| How often can you recognize that the residents are kept in wet pads unnecessarily long | .397 |
| How often does it happen that the residents do not have the appropriate hygiene | .524 |
| How often does it happen that the residents do not have enough quantity to drink | .491 |
| How often does it happen that the residents in appropriately or deficiency dressed | .341 |
| How often does it happen that the residents do not get enough quantity of food (too much or too little) | .354 |
| How often does it happen that the residents are not appropriately fed (too fast, too cold or too hot food) | .611 |
| How often can you recognize the untidy dwelling place of the resident | .518 |
| How often does it happen that resident does not get the necessary therapy (dose, time) | .464 |
| How often can you recognize that the residents are exposed to unnecessary pains | .498 |
| How often you are not able to accompany the resident at moving outside the room because of your overload | .468 |
| How often can you recognize humiliating - vulgar relationship when speaking to residents | .424 |
| How often can you recognize the presence of an angry and loud vice when speaking to an individual resident | .599 |
| How often can you recognize the neglection of wishes, expressed by residents | .400 |
| How often can you recognize making fools out of the residents | .387 |
| How often can you recognize the violation of intimacy | .746 |
| How often can you recognize the violation of privacy (being aware that the resident room is also his/her home) | .724 |
| How often do you recognize rough handling with the residents | .347 |
| How often can you recognize that the nursing care is realized inappropriately according to the place or situation | .543 |
| How often can you recognize that the residents are unnecessarily tied to prevent movement | .555 |
| How often can you recognize that the residents are too long in inappropriate position (lying in bed, seating on wheel-chair) | .554 |

Extraction Method: Principal Axis Factoring.
Table app4.11: Total Variance Explained

<table>
<thead>
<tr>
<th>Factor</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>7.136</td>
<td>31.024</td>
</tr>
<tr>
<td>2</td>
<td>1.973</td>
<td>8.578</td>
</tr>
<tr>
<td>3</td>
<td>1.566</td>
<td>6.811</td>
</tr>
<tr>
<td>4</td>
<td>1.392</td>
<td>6.052</td>
</tr>
<tr>
<td>5</td>
<td>1.146</td>
<td>4.983</td>
</tr>
<tr>
<td>6</td>
<td>1.055</td>
<td>4.588</td>
</tr>
<tr>
<td>7</td>
<td>.944</td>
<td>4.106</td>
</tr>
<tr>
<td>8</td>
<td>.912</td>
<td>3.967</td>
</tr>
<tr>
<td>9</td>
<td>.874</td>
<td>3.802</td>
</tr>
<tr>
<td>10</td>
<td>.742</td>
<td>3.224</td>
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<tr>
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<td>.648</td>
<td>2.819</td>
</tr>
<tr>
<td>12</td>
<td>.593</td>
<td>2.577</td>
</tr>
<tr>
<td>13</td>
<td>.588</td>
<td>2.554</td>
</tr>
<tr>
<td>14</td>
<td>.519</td>
<td>2.257</td>
</tr>
<tr>
<td>15</td>
<td>.511</td>
<td>2.223</td>
</tr>
<tr>
<td>16</td>
<td>.458</td>
<td>1.990</td>
</tr>
<tr>
<td>17</td>
<td>.411</td>
<td>1.786</td>
</tr>
<tr>
<td>18</td>
<td>.379</td>
<td>1.646</td>
</tr>
<tr>
<td>19</td>
<td>.317</td>
<td>1.377</td>
</tr>
<tr>
<td>20</td>
<td>.264</td>
<td>1.147</td>
</tr>
<tr>
<td>21</td>
<td>.219</td>
<td>.952</td>
</tr>
<tr>
<td>22</td>
<td>.203</td>
<td>.838</td>
</tr>
<tr>
<td>23</td>
<td>.151</td>
<td>.654</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
Table app4.12 Rotated Factor Matrix(a)

<table>
<thead>
<tr>
<th>Factor</th>
<th>1 N</th>
<th>2 PH</th>
<th>3 PS</th>
<th>4 PH</th>
<th>5 PH</th>
<th>6 PS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the residents on your ward exposed to any kinds of inappropriate relationship PS</td>
<td>.060</td>
<td>.194</td>
<td>.117</td>
<td>.135</td>
<td>.077</td>
<td>.579</td>
</tr>
<tr>
<td>How often does it happen that the residents on the ward are left alone (without necessary control) N</td>
<td>.427</td>
<td>.087</td>
<td>.217</td>
<td>.196</td>
<td>.305</td>
<td>.145</td>
</tr>
<tr>
<td>How often does it happen that the resident cannot get the help, for which he/she has asked N</td>
<td>.300</td>
<td>.072</td>
<td>.097</td>
<td>.087</td>
<td>.583</td>
<td>.224</td>
</tr>
<tr>
<td>How often can you recognize that the residents are kept in wet pads unnecessarily long N</td>
<td>.627</td>
<td>.063</td>
<td>.107</td>
<td>.096</td>
<td>.196</td>
<td>.055</td>
</tr>
<tr>
<td>How often does it happen that the residents do not have the appropriate hygiene N</td>
<td>.633</td>
<td>.082</td>
<td>.022</td>
<td>.342</td>
<td>.055</td>
<td>.004</td>
</tr>
<tr>
<td>How often does it happen that the residents do not have enough quantity to drink N</td>
<td>.631</td>
<td>.326</td>
<td>-.067</td>
<td>.179</td>
<td>.071</td>
<td>.071</td>
</tr>
<tr>
<td>How often does it happen that the residents in appropriately or insufficiently dressed N</td>
<td>.238</td>
<td>.142</td>
<td>-.039</td>
<td>.417</td>
<td>-.093</td>
<td>.008</td>
</tr>
<tr>
<td>How often does it happen that the residents do not get enough quantity of food (too much or too little) N</td>
<td>.193</td>
<td>.077</td>
<td>.147</td>
<td>.424</td>
<td>.080</td>
<td>.146</td>
</tr>
<tr>
<td>How often does it happen that the residents are not appropriately fed (too fast, too cold or too hot food) N</td>
<td>.538</td>
<td>.417</td>
<td>.129</td>
<td>.246</td>
<td>.172</td>
<td>.077</td>
</tr>
<tr>
<td>How often can you recognize the untidy dwelling place of the resident N</td>
<td>.343</td>
<td>.105</td>
<td>.451</td>
<td>.267</td>
<td>-.124</td>
<td>.226</td>
</tr>
<tr>
<td>How often does it happen that resident does not get the necessary therapy (dose, time) PH</td>
<td>.195</td>
<td>.081</td>
<td>.051</td>
<td>.627</td>
<td>.066</td>
<td>.145</td>
</tr>
<tr>
<td>How often can you recognize that the residents are exposed to unnecessary pains PH</td>
<td>.038</td>
<td>.280</td>
<td>.171</td>
<td>.649</td>
<td>.282</td>
<td>-.111</td>
</tr>
<tr>
<td>How often you are not able to accompany the resident at moving outside the room because of your overload N</td>
<td>.482</td>
<td>.237</td>
<td>.177</td>
<td>.108</td>
<td>.204</td>
<td>-.028</td>
</tr>
<tr>
<td>How often can you recognize humiliating - vulgar relationship when speaking to residents PS</td>
<td>-.007</td>
<td>.051</td>
<td>.491</td>
<td>-.074</td>
<td>.341</td>
<td>.425</td>
</tr>
<tr>
<td>How often can you recognize the presence of an angry and loud vice when speaking to an individual resident PS</td>
<td>.259</td>
<td>.076</td>
<td>.802</td>
<td>.223</td>
<td>-.088</td>
<td>.075</td>
</tr>
<tr>
<td>How often can you recognize the negligence of wishes, expressed by residents N</td>
<td>.147</td>
<td>.251</td>
<td>.446</td>
<td>-.031</td>
<td>.276</td>
<td>.031</td>
</tr>
<tr>
<td>How often can you recognize making fools out of the residents PS</td>
<td>-.093</td>
<td>.204</td>
<td>.516</td>
<td>.053</td>
<td>.127</td>
<td>.054</td>
</tr>
<tr>
<td>How often can you recognize the violation of intimacy PS</td>
<td>.312</td>
<td>.069</td>
<td>.321</td>
<td>.140</td>
<td>.200</td>
<td>.019</td>
</tr>
<tr>
<td>How often can you recognize the violation of privacy (being aware that the resident room is also his/her home) PS</td>
<td>.303</td>
<td>.714</td>
<td>.172</td>
<td>.079</td>
<td>.229</td>
<td>.046</td>
</tr>
<tr>
<td>How often do you recognize rough handling with the residents PH</td>
<td>.158</td>
<td>.122</td>
<td>.176</td>
<td>.085</td>
<td>.505</td>
<td>-.035</td>
</tr>
<tr>
<td>How often can you recognize that the nursing care is realized inappropriately according to the place or situation PH</td>
<td>.290</td>
<td>.461</td>
<td>.164</td>
<td>.260</td>
<td>-.207</td>
<td>.325</td>
</tr>
<tr>
<td>How often can you recognize that the residents are unnecessarily tied to prevent movement PH</td>
<td>.015</td>
<td>.671</td>
<td>.083</td>
<td>.186</td>
<td>.036</td>
<td>.107</td>
</tr>
<tr>
<td>How often can you recognize that the residents are too long in inappropriate position (lying in bed, seating on wheel-chair) PH</td>
<td>.328</td>
<td>.473</td>
<td>.183</td>
<td>.305</td>
<td>.037</td>
<td>.118</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 9 iterations.
N Negligence in care
PS Psychic maltreatment
PH Physical maltreatment
5. The instrument measuring nursing staff well-being

**Table app.4.13 Communalities**

| How often do you feel physically tired | .551 |
| How often do you feel psychically exhausted | .515 |
| How often there is no adequate number of nursing staff in the ward | .252 |
| How often does it happen that you have to be too much responsible for the residents | .408 |
| How often can you recognize the inappropriate relationship among the members of the nursing staff | .109 |
| How often can you get real understanding and help of the leading staff | .252 |
| How frequently can you get the possibility for professional education in elderly care (gerontological nursing) | .036 |
| How often can you rely on help of the nursing staff when you get into troubles | .272 |

Extraction Method: Principal Axis Factoring.

**Table app.4.14 Total Variance Explained**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2,588</td>
<td>32,356</td>
</tr>
<tr>
<td>2</td>
<td>1,450</td>
<td>18,123</td>
</tr>
<tr>
<td>3</td>
<td>1,027</td>
<td>12,842</td>
</tr>
<tr>
<td>4</td>
<td>.861</td>
<td>10,761</td>
</tr>
<tr>
<td>5</td>
<td>.786</td>
<td>9,821</td>
</tr>
<tr>
<td>6</td>
<td>.535</td>
<td>6,682</td>
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<tr>
<td>7</td>
<td>.489</td>
<td>6,113</td>
</tr>
<tr>
<td>8</td>
<td>.264</td>
<td>3,302</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
Table app4.15 Rotated Factor Matrix (a)

<table>
<thead>
<tr>
<th></th>
<th>Factor 1 W</th>
<th>Factor 2 W</th>
<th>Factor 3 R</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you feel physically tired</td>
<td>.638</td>
<td>.383</td>
<td>-.093</td>
</tr>
<tr>
<td>How often do you feel psychically exhausted</td>
<td>.940</td>
<td>.202</td>
<td>-.002</td>
</tr>
<tr>
<td>How often there is no adequate number of nursing staff in the ward</td>
<td>.252</td>
<td>.466</td>
<td>-.013</td>
</tr>
<tr>
<td>How often does it happen that you have to be too much responsible for the residents</td>
<td>.262</td>
<td>.842</td>
<td>-.204</td>
</tr>
<tr>
<td>How often can you recognize the inappropriate relationship among the members of the nursing staff</td>
<td>.243</td>
<td>.117</td>
<td>-.132</td>
</tr>
<tr>
<td>How often can you get real understanding and help of the leading staff</td>
<td>-.048</td>
<td>-.067</td>
<td>.570</td>
</tr>
<tr>
<td>How frequently can you get the possibility for professional education in elderly care (gerontological nursing)</td>
<td>-.050</td>
<td>-.109</td>
<td>.148</td>
</tr>
<tr>
<td>How often can you rely on help of the nursing staff when you get into troubles</td>
<td>-.041</td>
<td>-.013</td>
<td>.825</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 5 iterations.
W Work related well-being
R Relationship related well-being
1006. Westerlund, Tarja (2009) Thermal, circulatory, and neuromuscular responses to whole-body cryotherapy


1008. Kuisma, Mari (2009) Magnetic resonance imaging of lumbar degenerative bone marrow (Modic) changes. Determinants, natural course and association with low back pain


1010. Löfgren, Johan (2009) Genetic polymorphisms in collectins and Toll-like receptor 4 as factors influencing susceptibility to severe RSV infections and otitis media


1013. Teeri, Sami (2009) Factors affecting outcome after primary intracerebral hemorrhage


1019. Karppinen, Sanna-Maria (2009) The role of BACH1, BARD1 and TOPBP1 genes in familial breast cancer

Ana Habjanic

QUALITY OF INSTITUTIONAL ELDERLY CARE IN SLOVENIA