

## Health-Related Counseling of Elderly People in the Domestic Setting

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### Abstract

**Introduction:** *In accordance with the wish of elderly people to live independently in their own homes for as long as possible, appropriate consideration should be granted to the promotion of elderly people's independence from a social and health-political viewpoint.*

**Aim:** *The aim was to assess the functional health of elderly people living at home and thus, based on individual problem areas and resources, the need for provision of health-related counseling.*

**Method:** *In the framework of an exploratory cross-sectional study, entitled "Preventive Senior Counseling in Tyrol", a multidimensional nursing assessment through self-reporting was performed on 345 people aged 70+. Derived from the individual assessed problem areas and resources, the registered nurses decided which of the recommended and standardized 14 counseling topics were relevant for the individual participants.*

**Results:** *Initially, the sample of elderly people was analyzed in relation to their belonging to one of four functional health-related risk groups (e.g. risk of falls etc.). Many people – irrelevant if they belonged to any of the risk groups or none at all - showed a high degree of independence as well as a multitude of health-related impairments. All of these findings highlighted a pronounced need for counseling, although on different topics.*

**Discussion:** *The preventive home visit, as offered here, was used as a counseling instrument for elderly people in the domestic setting. A serious need for counseling on issues that support independent living at home derives from the nursing assessment of the participants' problem areas and resources.*

**Keywords:** functional health; 70+ year olds living at home; risk group; counseling,

### Introduction

The vast majority of elderly people want to be able to live independently at home for as long as possible [1]. In this context it is primarily important that elderly people live a largely autonomous life with as little dependency as possible on outside help. If they are dependent on outside help that they are able to use the necessary means of support in such a way that independent living in the main areas of life is still possible [2]. To meet this wish, appropriate consideration should be granted to the promotion of elderly people's independence from a social and health-political viewpoint. The preventive home visit is a means to postpone the dependency on care, to make full use of preventive potentials and to minimize health risks [3]. Furthermore, self-care competence has to be promoted, besides support and care by relatives as well as by social services.

Taking into consideration the above mentioned aspects, we conducted a cross-sectional study, entitled "Preventive Senior

Counseling in Tyrol", which focused on preventive home visits to people aged 70+ living at home in Tyrol.

### Aims

Within the scope of preventive home visits, registered nurses evaluated the self-reported functional health of 70+ year olds living at home by means of a nursing assessment and provided counseling on the promotion of independent living, based on identified problem areas and resources in relation to functional health.

### Definition of Terms

**Independent Living:** in old age in this context is defined as multidimensional concept which is based on a biopsychosocial approach including the multifarious living backgrounds of seniors, their abilities and present difficulties as well as environment-related factors and their interrelations [4].

**Functional Health:** A person is functionally healthy if (a) his/her body functions (including mental functions) correspond to the functions of a healthy human being (concept of body functions

and structures), (b) he/ she is able to do all the things which can be expected from a person without health problems (concept of activities), (c) he/ she can master his/ her life in all life situations which are important to this individual in a way which can be expected from a person without impairments of body functions, body structures or activities (concept of participation in all life situations) [5].

**Austrian Care Allowance System:** In Austria, people's need for nursing care has been assessed based on the seven levels of care allowance since 1993. Care need is a demand for care and assistance which must amount to at least 65 hours per month and "will presumably last for at least six months." The assessment of the care level is part of the care allowance assessment and is primarily body- and functionality-related [6].

### Ethical Aspects

The study was forwarded to the Research Committee for Scientific and Ethical Questions (RCSEQ) at UMIT and was approved prior to the start of the study.

### Methods

#### Research Questions

The following two research questions were defined with a focus on possible risk groups of elderly people living at home as there is evidence that

- The risk of being dependent on care is higher for people aged 80 and older [7].
- A higher frequency of falls has an influence on a possible institutionalization [8].
- The risk of care dependency [7] and thus the risk of institutionalization is higher for people who receive care allowance or people who are already in need of care (either by nursing relatives or professional services) [6,9].

**Research Question 1:** What are the functional health-related problem areas and resources of people aged 70+ living at home, who are 80 or older, fall-prone as well as dependent on nursing care and/ or receive care allowance?

**Research Question 2:** Which need for counseling on functional health-related topics can be derived from the results of the assessment of people aged 70+ living at home, who are 80 or older, fall-prone as well as dependent on nursing care and/ or receive care allowance?

#### Sample and Recruiting

Recruitment of the study participants is based on a convenience sample of 345 people aged 70+ living at home in Tyrol. Inclusion criteria were age 70+ at the time of the study, no cognitive impairments, a signed written declaration of consent as well as no legal guardian. The nurses who collected the data during the study "Preventive Senior Counseling in Tyrol" were all registered nurses with at least three years' work experience in mobile care and nursing [10].

#### Study Design

For this study we chose an exploratory quantitative cross-sectional study design.

### Instrument – Nursing Assessment incl. Consultation Form

The nursing assessment was a self-reported questionnaire based on the theoretical model of the WHO classification and the patient questionnaire STEP (Standardized Assessment of Elderly People in Primary Care) [5, 11]. The nursing assessment consisted of two parts: (1) contextual factors – socio-demographic data, current use of nursing care, care allowance level – (2) functionality of a person – body functions (physical, emotional-psycho & motion-related health status) – activities including two standardized instruments, Barthel Index (BI) and IADL Index [12,13]. The computer-assisted two-part nursing assessment lasted 45 minutes on average.

### Counseling Through Standardized Consultation Forms

The consultation form with 14 topics, on the one hand, was based on the results of the project „Preventive Home Visits to Elderly People – Projekt mobil“ and on the other hand, was based on the consultation form used in the project „Senior Counseling in Tennengau, Salzburg“ [4,14]. For the conduct of the present study, this consultation form was adapted to the local conditions by registered nurses in an expert conference. The nursing assessment and the subsequent counseling were computer-assisted and designed to suggest the registered nurses appropriate topics with standardized contents for each of the identified problem areas and resources of the 70+ year olds. The registered nurse then decided on the type of counseling needed to support the independent living of each individual participant.

### Data Analysis

The computer-assisted data collection allowed for automatic data conversion for further statistical analysis in SPSS 20.0 Version for Windows. All statistical analyses were performed with SPSS 20.0 for Windows. Descriptive data analysis was performed corresponding to the respective scale level through measures of location and dispersion. As a measure of association for calculating the risk of falling, we used odds ratios (OR) with 95% CI [15]. We chose a significance level of  $\alpha=5\%$ .

### Selected Results

#### Sample

The total sample included 345 people aged 70+ living at home. The major part of the participants was female (70%). The average age was 83. 51% of the people were widowed, 84% had children – 2.4 on average. 50% of the participants were living alone.

### Results with Respect to Possible Risk Groups

**Risk Group – Age:** 81% of the 345 participants were 80 and older.

#### Risk Group – People who had a Fall, Which Means They Come or go Down Involuntarily From a Standing Position to

**The Floor or a Lower Position:** 47% of 344 people aged 70+ stated that they had a fall at least once during the last year [16]. Asked for the fall frequency, 40% said that they fell „once“, 25% said that they fell „twice“ and 35% said that they fell „more than twice“ during the last year. Among the group of people who had a fall (n=162), 16 risk factors could be identified. People whose BI indicated „a dependency on care“ or who expressed motion-related impairments and were unsatisfied with their health status had the highest risk of suffering a fall.

**Risk Group – Recipients of Care Allowance:** 47% of the participants stated that they received care allowance. Most of them were in care level 2 (39%), followed by 25% in care level 1, 20% in care level 3 and 16% in care levels 4 to 6.

**Risk Group - People in Need of Nursing Care by Relatives (Informal Care) as well as by External Institutions (Home Help):** 40% (n=136) of the interviewed 70+ year olds said that they were in need of nursing care. Out of this 40%, the higher percentage (54%) were being taken care of by „relatives“ (=informal care), 29% by „external institutions“ and 17% by „external institutions“ as well as by „relatives“.

The majority of 70+ year olds living at home are being taken care of by their own children (mostly by the daughters with 57%), followed by spouses in 26% and children-in-law in 17% of the cases.

### Provided Counseling

In total, 326 out of 345 people aged 70+ received 641 consultations on health- and nursing-related topics and 785 consultations on financial, legal or socio-institutional topics. Most frequently, consultations were provided on the offers by municipal social services (60%), care allowance (58%), behavior in emergency situations (45%), safe housing (40%), acquisition of aids (36%) as well as on specific exercises and mobility improvement (31%).

### Counseling with Respect to Risk Groups

The following statements solely refer to significant findings in relation to the need for counseling of: people aged 80(>) vs. people aged <80; people who had a fall vs. people who did not have a fall, people who receive care allowance vs. people who do not receive care allowance, as well as people in need of nursing care vs. people not in need of nursing care.

**Risk Group - Age:** 80+ year olds had significantly ( $p=.033$ ) more counseling on safe housing than people aged 70-79. Conversely, people aged 70-79 had significantly ( $p=.025$ ) more counseling on care allowance and on group activities provided by municipal social services ( $p=.021$ ).

**Risk Group – People who had a Fall:** People who had a fall had highly significantly ( $p<.001$ ) more counseling on specific exercises and mobility improvement and significantly ( $p=.036$ ) more counseling on safe housing than people who did not have a fall.

**Risk Group – Care Allowance Recipients:** It became evident that people who did not receive care allowance had highly significantly ( $p<.001$ ) more counseling on care allowance than care allowance recipients.

**Risk Group - People in Need of Nursing Care:** People in need of nursing care had highly significantly ( $p<.001$ ) more counseling on specific exercises and mobility improvement as well as on medication intake. Furthermore, they had significantly more counseling on the acquisition of aids, medical evaluation as well as food and drink than people not in need of nursing care.

### Planned Interventions Subsequent to Counseling

Subsequent to counseling, 17 possible interventions were planned

individually with the 70+ year olds living at home (e.g. assistance in filing an application for care allowance, home adaptations, arrangement of home care services...). It was also discussed if the 70+ year olds should implement those measures themselves or if relatives and/ or other external institutions should do so. Moreover, the participants could refuse certain measures.

As an example, in the following the results of the risk group care allowance recipients vs. non-care allowance recipients are presented.

**Risk Group Care Allowance Recipients vs. Non-Care Allowance Recipients:** Among the 47% (n=161) of care allowance recipients, we identified 60% (n=96) who were eligible to apply for a care allowance payment increase. In most cases, the participants (n=95, 59%) said that their relatives would apply for the payment increase. It was interesting to note that six people refused to apply.

As to the non-recipients of care allowance (53%, n=184), we identified 112 (61%) who were eligible to submit an initial application for care allowance. Also in these cases, the majority of participants (76%, n=86) requested that their relatives should file the application. Also in this group participants refused to apply (n=9).

### Discussion

The results in relation to the self-assessed functional health of people aged 70+ showed a multitude of health problems associated with assistance and care, like diseases, sleeping problems, pain, motoric deficits etc [5]. and highlighted serious need for counseling on health- and nursing-related, socio-institutional as well as financial and legal issues in order to support independent living at home. With respect to possible risk groups of elderly people (which are people: (a) aged 80+, (b) who had a fall in the last year, (c) who receive care allowance, (d) in need of assistance and nursing care) it became evident that both groups of 70+ year olds (people who belonged to one or more of these risk groups vs. people who did not belong to any of these risk groups) had a serious need for counseling on functional health, although to different levels. The preventive home visit, as offered in the setting of this study, was used as a counseling instrument. Instead of a general training program, a counseling program was conducted, similar to the studies by Sherman et al. and which ought to be the basis for targeted support planning [17,18].

### Outlook Work Science

Based on the results of the study, a systemic integration of preventive home visits including counseling and intervention planning was recommended to the respective political representatives. In 2014, preventive home visits were legally incorporated into the service catalogue of mobile care services by a resolution of the Federal Government of Tyrol and have been offered since then free of charge to all people aged 70+ living at home in Tyrol.

In conclusion, it should be noted that the purpose of the present study with its study design primarily was to make the 70+ year olds aware of their life and health situation, with the possible consequence to adjust their living situation to the age-specific changes and to activate possible resources. We cannot tell whether the provided counseling and interventions have led to sustained

improvements of the physical, psychological and social well-being of the 70+ year olds as no efficacy testing was conducted [19,20].

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