RESEARCH ARTICLE

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# The quality of life of older adults acutely admitted to the emergency department: A cross-sectional study

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## Abstract

**Aim:** To investigate perceptions of individual QoL among acutely admitted older adults and explore whether homecare and readmission were associated with QoL.

**Design:** A cross-sectional study at three Danish Emergency Departments.

**Methods:** Semi-structured interviews, using the Schedule for the Evaluation of Individual Quality of Life – Direct Weighting (SEIQol-DW) (range 0–100) with patients ≥65 years, were conducted from August 2018 to July 2019. The differences between patients receiving homecare (yes/no) and readmission (yes/no) were tested using linear regression analyses with bootstrap procedures.

**Results:** Overall, we included 406 patients, of whom 38% received homecare. The mean SEIQoL-DW-score was 76 ($SD = 19$). The most important areas of individual QoL were Family, Social activities, Health, Everyday life and Leisure activities. Receiving homecare was associated to a significantly lower QoL score: −8 ($SE = 2$) and a significantly lower score in the categories Family and Health. There was no association between readmission and QoL.

**KEYWORDS**
emergency departments, home care, older people, readmission, schedule for the evaluation of individual quality of life

## 1 | INTRODUCTION

The Danish healthcare system has a strong focus on a patient's continuity of care based on individual needs, capabilities and wishes (Ministry of Health, 2017). Health-related Quality of Life (HRQoL) is used as an outcome to evaluate interventions, care and treatment of older people in clinical research (Bjerk et al., 2017; Newham et al., 2017; Uchmanowicz & Gobbens, 2015). A detailed assessment

of Quality of Life (QoL) provides a more nuanced picture of vital facets of life rather than just focusing on the absence of disease and disability. Focus on individual approaches when measuring QoL by identifying and rating categories of QoL was the underlying premise in the development of an interview-based instrument, The Schedule for the Evaluation of Individual Quality of Life (SEIQoL) (O'Boyle et al., 1992). The SEIQoL has been rated higher concerning subjective validity than SF-36 and the Sickness Impact Profile (SIP) (Neudert

et al., 2001). By identifying and rating QoL categories, the SEIQoL questionnaire reveals QoL based on individual preferences that embrace physical, psychological and social areas of life. Learning about individual QoL preferences might facilitate communication between health professionals and patients by raising specific QoL concerns for discussion and thus increase the QoL for the patients. This study investigates perceptions of individual QoL among acutely admitted older adults and explores whether homecare and readmission are associated with QoL.

## 2 | BACKGROUND

In 2016, there were 1.2 million acute contacts to Emergency Departments (ED) in Denmark, and of those, nearly 70% lasted <24 hr (Fløjstrup et al., 2020). Older adults admitted to an ED are often extraordinarily challenged with comorbidities, cognitive impairments and dependence on others for activities of daily living (ADL) (Buurman et al., 2016; Gray et al., 2013; Kennelly et al., 2014). Acutely admitted adults above 65 years of age report a lack of communication, different expectations, frustration about care, strained relations to health professionals and feelings of being objectified (Boye et al., 2021). ED care with high activity, accelerated treatment processes and early discharge might not cover the need for individual care among older adults due to their functional limitations and chronic diseases.

A Danish study has reported that around 35% of medical patients aged 65 or above in an ED received homecare due to dependency in activities of daily living (ADL) (Tanderup et al., 2019). A higher HRQoL was associated with the ability to perform ADL (Brown & Flood, 2013) and a lower risk of functional decline (Parlevliet et al., 2016). ED care and rapid discharge may leave the older adults receiving homecare in a complicated situation due to their dependency on others. A study from 2020 reported that after a short-term hospitalization (<24 hr), approximately 20% of Danish adults aged 75 or above were readmitted (Klinge et al., 2020). Furthermore, a higher readmission rate was reported from older adults discharged from an ED than other hospitalized patients (Deschodt et al., 2015). Lower self-reported HRQoL was associated with an increased risk of readmission (Hutchinson et al., 2013). However, to what extent readmissions and receiving homecare impact perceived QoL is not evident.

A more holistic approach to older acutely admitted patients could be an appraisal of QoL. This evaluation would contribute to knowledge about potential 'target areas' supporting QoL in care and treatment processes. The SEIQoL questionnaire provides health professionals with the opportunity to discover nuances of QoL based on individuals' preferences. Knowledge about patients' individual QoL preferences may facilitate coherent care and strengthen communication. This additional knowledge can improve care processes tailoring them to patients' individual needs and wishes related to their QoL. We hypothesized that older adults receiving homecare can identify different aspects important for their QoL and rate their individual QoL lower compared to older adults without homecare. Furthermore, we hypothesized that older adults who are readmitted

will have lower individual QoL at the initial admission compared to older adults who are not readmitted. Thus, the objective of this study was to investigate the individual QoL among acutely admitted older adults and explore whether homecare and readmission are associated with QoL. Our research question was how do older adults evaluate their individual QoL during an ED admission, and are this evaluation associated with receiving homecare before admission or readmission?

## 3 | MATERIALS AND METHODS

### 3.1 | Study design and settings

We conducted a multi-centre cross-sectional study at three EDs in the Region of Southern Denmark (University Hospital of Southern Denmark at Aabenraa, Esbjerg and Kolding) from August 2018 to July 2019. The three settings were chosen because they were comparable regarding the size, treatment, catchment area, organizational structure and procedures. All the EDs are organized by the same principle guided by the Ministry of Health (Ministry of Health, 2020). Three different EDs made it possible to include a wide population with individuals from urban and rural areas, and the three EDs cover three out of four acute hospitals in the Region of Southern Denmark.

Initially, we conducted a pilot study to test the feasibility of The Schedule for the Evaluation of Individual Quality of Life – Direct Weighting (SEIQoL-DW) for older acutely admitted patients. The pilot study involved nine patients (seven females) aged between 65 and 80 years. All patients were able to select and rate five QoL areas without assistance, resulting in a mean SEIQoL-DW score of 73 (SD 20).

### 3.2 | Participants

We invited patients aged 65 years or above who stayed overnight at the ED to participate and who had a score from the orientation, memory and concentration (OMC) test above 18 points (Katzman et al., 1983). The OMC test was used to assess eligible patients' cognitive function, and the results from the tests are not reported further.

We excluded patients if they were expected to be admitted for more than 48 hr to focus on the QoL of short-stay acute patients. Patients were also excluded if they could not give informed consent, were known or believed to be cognitively impaired, or had an inadequate level of written and spoken Danish. Finally, patients with OMC scores below 18 points were excluded. The nurses in the EDs identified eligible patients and offered them written and verbal information about the study.

### 3.3 | Outcome variable

The primary variable was the individual QoL measured by SEIQoL-DW and presented as an index score (0 [lowest QoL] to

100 [highest QoL]) derived from a semi-structured interview. Initially, the SEIQoL was developed to identify and rate the most important areas of QoL in patients undergoing hip replacement (O'Boyle et al., 1992). The weighted version of the questionnaire, SEIQoL-DW, was developed in 1996 and replaced the former judgement analysis technique with a simpler procedure for measuring the relative importance of the nominated life areas (Hickey et al., 1996). The weighted version is valid and feasible when measuring individual QoL in clinical research (Wettergren et al., 2009) and validated against the full version of SEIQoL (Hickey et al., 1996). We translated the SEIQoL-DW questionnaire into Danish (Appendix A) and tested face validity on three acutely admitted patients aged 65 years or older from an ED. The patients understood and completed the interview, and we consider the Danish version of the SEIQoL-DW acceptable for use in this study.

According to the administration manual, SEIQoL-DW-interviews are planned in three steps (O'Boyle et al., 1992). Firstly, the patients nominate five meaningful (positive and negative) areas in their life, the so-called cues. Secondly, the patients rate the five nominated areas regarding QoL fulfilment on a visual analogue scale (VAS) from worst to best (0–100), referred to as QoL level. Thirdly, the patients scored the relative importance of each of the five areas by a direct weighting (DW) procedure using a pie chart consisting of five coloured segments. Each colour represented a life area nominated by the patient as significant to their individual QoL. The size of the areas reflected the relative importance of each area, referred to as QoL weight. The total summed value of all five coloured segments in the pie chart equalled 100. The overall index SEIQoL-DW score was calculated by multiplying the QoL level by the QoL weight for each area.

The SEIQoL-DW interviews were conducted by the first author and two trained research assistants. An observer was present for the first interview, for example the first author observed the research assistant and vice versa. After these initial interviews, the methods, quality and interviewer's approach were discussed to ensure a uniform procedure. Written notes were taken during each interview to establish and document the meaning behind the QoL areas described by each participant and identify and categorize the QoL segments (O'Boyle et al., 1992). These QoL segments were condensed into categories and recoded in a codebook. Examples of these categories were: 'Family' incorporating QoL segments such as relationships, concerns for and support from family, 'Social activities' covering QoL segments such as friends and neighbours, help and support from friends and the enjoyment of company and 'Health' incorporating segments such as limitations to physical and mental health, well-being and healthy life. Each SEIQoL-DW interview was coded using this codebook (Appendix B).

### 3.4 | Exposure variables

The two exposure variables were: (1) received homecare (yes/no) before the ED admission and (2) readmission in 30 days after the initial admission (yes/no). In Denmark, municipalities offer free-of-charge homecare for residents who are unable to manage everyday life independently. After a thorough assessment of individual needs, homecare is always offered with a specific goal of restoring, maintaining or improving mental and physical function (Ministry of Health, 2017). The local municipalities share information about homecare with the hospitals through a digital platform. In this study, homecare data on patients living in the Region of Southern Denmark were collected from the patients' hospital records. Homecare encompassed at least one of two activities in the patient's home: (1) 'Personal care', which included assistance with personal hygiene, dressing, morning routines or eating and (2) 'Practical help', which included assistance with cleaning, laundry or shopping. Readmission was defined as an unscheduled hospitalization (a minimum stay of 6 hr in 30 days after discharge from the initial admission) and all causes of readmission were included. Data about readmission was also obtained from the patient's medical records.

### 3.5 | Co-variables

We collected data from the patient interviews including age, sex, marital status (single/cohabitant), social support and length of education. Patients' experiences of 'social support' from friends and family were rated from 1 [lowest support] to 5 [highest support]. Subsequently, we converted the variable 'social support' to a binary variable covering: (1) experienced social support as 'not at all', 'to a small extent' or 'to some extent' or (2) experienced social support to a 'great' or 'very great extent'. The level of education was included as a socio-economic factor. Education was categorized using the Danish Qualifications Framework for Education Levels (1): Primary education, (2): Lower secondary education, (3): Upper secondary education, (4): Post-secondary education, (5): Short-cycle tertiary education, (6): Bachelor or equivalent, (7): Master or equivalent and (8): Doctoral (PhD) or equivalent (Danish Evaluation Institute, 2011). The educational levels were converted to a binary variable: lower education (levels 1–2) or higher education (levels 3–8). Comorbidities collected from the patient's medical records were described as one of three subcategories: (1) patients with no comorbidity, (2) patients with 1–2 comorbidities and (3) patients with 3 or more comorbidities.

### 3.6 | Sample size calculation

The sample size calculation was based on the difference in SEIQoL-DW among readmitted/not readmitted patients as we assumed that the allocation of readmitted/not readmitted patients in the ED derived a larger sample than the allocation of homecare/no homecare patients. We assumed a 10% difference in SEIQoL-DW score between patients who were readmitted (in 30 days) compared to patients who were not readmitted based on a 20% readmission rate. Data for readmission used in the sample size calculation was extracted from Statistic Denmark (Denmark Statistic). We used

a mean SEIQoL-DW score of 66.2 (*SD* = 18) based on a study by Matlabi and Ahmadzadeh (2017). We estimated that a total of 365 patients were required to detect a significant difference: 73 participants in the group of readmitted patients and 292 patients in the group of not readmitted patients ($\alpha$ = 5% and power = 80%). To adjust for an estimated 10% drop-out rate, we aimed to include 406 patients in the study.

## 3.7 | Statistics

Descriptive statistics were used to report frequency (%) for categorical variables and mean and standard deviation (*SD*) for continuous variables regarding demographic and clinical characteristics. The distribution of the data was assessed with Q-Q plots. Differences in demographic and clinical characteristics between the groups were tested using a two-sample *t* test with equal variance for continuous variables (normally distributed data), a two-sample Wilcoxon rank-sum test (non-normal distribution) or Pearson Chi-square for categorical variables.

The SEIQoL-DW index was reported as mean (*SD*), and the difference between groups was reported as a mean and standard error (*SE*). The differences between groups were (because of a non-normal distribution of the index score) tested using linear regression analyses with bootstrap procedures (10,000 repetitions) and were estimated as differences between means with 95% confidence intervals (95% CI). The regression analyses were adjusted for age, gender, marital status, social support, length of education and comorbidities. The identified QoL areas were categorized and presented with an index score as mean (*SD*). The difference in the identified QoL areas between patients who received homecare/no homecare was estimated using linear regression with bootstrap 95% CI (10,000 rep.). All analyses were performed using Stata version 16.1 (StataCorp). $p < .05$ were considered statistically significant.

## 3.8 | Ethical considerations

The study was reported to the Danish Data Protection Agency (file no. 2008–58–0035). The need for formal approval was waived by the Regional Ethics Committee of Southern Denmark (file no. 20182000–68) in accordance with Danish law. Participants gave written informed consent to participate and to allow access to their medical records.

## 4 | RESULTS

### 4.1 | Demographic and clinical characteristics of the study population

In total, 509 were eligible, but 88 declined participation (51% female; age 78 (*SD* = 8) years) and 15 patients failed the OMC test (73% female; age 84 (*SD* = 8) years). We included 406 patients (51% female),

age 76 (*SD* = 7) years. Table 1 outlines the demographic details of the study population. Overall, 156 patients (38%) received homecare. Patients receiving homecare were older: age 79 (*SD* = 8) versus 75 (*SD* = 6) years, fewer were married (40% versus 68%), more were female (60% versus 46%), more had ≥3 comorbidities (53% versus 32%), had a higher frequency of readmission (32% versus 14%), fewer experienced a great or a very great extent of social support (76% versus 90%) and fewer had a higher level of education (50% versus 68%), compared to patients without homecare (Table 1).

### 4.2 | Quality of Life index score

The overall individual QoL score for all patients was 76.1 (*SD* = 19.1) (min 2.6–max 100). Receiving homecare was related to a significantly lower individual QoL score (−8.1, 95% CI: −12.1 to −4.1) (Table 2). When adjusting for age, sex, marital status, social support and comorbidities, a significant difference between patients with and without homecare remained (Table 2). In addition, we found a significant association between experiencing social support from family and a higher QoL score. The analyses showed no difference in individual QoL among patients who were readmitted compared to patients not readmitted.

### 4.3 | Classification of quality of life

The patients identified 17 categories of importance for overall individual QoL (Appendix B). There was no difference between identified QoL categories from patients receiving homecare compared to patients without homecare. The five most selected categories were 'Family', 'Social activities', 'Health', 'Everyday life', and 'Leisure activities'. Areas related to the 'Family' were selected by more than 93% of the patients and was therefore the most preferred and highest rated QoL area with a mean value of 23(*SD* = 10). Patients receiving homecare rated their QoL significantly lower in the categories 'Family' (−3.8, 95% CI: −5.9 to −1.7) and 'Health' (−3.0, 95% CI: −5.3 to −0.7) compared to patients with no homecare indicating an association between QoL, these categories and receiving homecare (Table 3).

## 5 | DISCUSSION

Older adults with an acute admission in the ED reported a mean SEIQoL-DW score of 76 (*SD* = 19), and the most selected categories related to their individual QoL were 'Family', 'Social activities', 'Health', 'Everyday life' and 'Leisure activities'. The individual overall QoL score was affected by whether patients received homecare or not as the older adults receiving homecare rated their overall individual QoL and the categories 'Family' and 'Health' significantly lower compared to those without homecare. We found no difference between identified QoL categories from patients receiving homecare compared to

**TABLE 1** Baseline characteristics of the study population

| Baseline characteristics | All patients n = 406 | Not receiving homecare n = 250 | Receiving homecare n = 156 | Homecare versus without homecare p-value | Not readmitted n = 318 | Readmitted n = 84 | Readmitted versus not readmitted p-value |
|---|---|---|---|---|---|---|---|
| Gender | | | | | | | |
| Female (%) | 209 (51) | 115 (46) | 94 (60) | .005 | 159 (50) | 46 (55) | .437 |
| Age | | | | | | | |
| Years mean (SD) | 76(7) | 75(6) | 79(8) | <.001 | 77(8) | 76(7) | .419 |
| Marital status | | | | | | | |
| Cohabited (%) | 233 (57) | 171 (68) | 62 (40) | .001 | 190 (60) | 40 (48) | .046 |
| Readmission (30 days) | | | | | | | |
| Yes (%) | 84 (21) | 35 (14) | 49 (32) | .001 | — | — | — |
| Comorbidities (%) | | | | | | | |
| No comorbidity | 38 (9) | 33 (13) | 5 (3) | .001 | 35 (11) | 3 (4) | .012 |
| 1–2 comorbidities | 207 (51) | 138 (55) | 69 (44) | | 166 (52) | 37 (44) | |
| ≥3 comorbidities | 161 (40) | 79 (32) | 82 (53) | | 177 (37) | 44 (52) | |
| Social support (%) | | | | | | | |
| (1) Not at all – some extent | 62 (15) | 25 (10) | 37 (24) | .001 | 51 (16) | 11 (13) | .511 |
| (2) Great – very great extent | 340 (85) | 222 (90) | 118 (76) | | 264 (84) | 72 (87) | |
| Educational level (%) | | | | | | | |
| (1) Lower level | 157 (39) | 79 (32) | 78 (50) | .001 | 123 (39) | 33 (39) | .919 |
| (2) Higher level | 249 (61) | 171 (68) | 78 (50) | | 195 (61) | 51 (61) | |

*Note*: Data are reported as mean, standard deviation (SD) and frequencies (%). Difference between groups was tested with *t*-test (normal distribution), Wilcoxon test (not-normally distributed) or Pearson chi2. Significance level: <.05. Readmission was defined as a new admission within 30 days after the index admission. Four patients died after inclusion, and thus data about readmission is missing for these patients. Four patients did not report their experience of social support, and thus data on social support is missing for these patients.

**TABLE 2** The overall QoL score and difference between patients receiving homecare versus no homecare

| QoL score | No homecare (n = 249) | Homecare (n = 156) | Difference | 95% CI |
|---|---|---|---|---|
| QoL score | 79.2(16.8) | 71.1(21.4) | −8.1(2.0) | −12.1 to −4.1** |
| QoL score (adjusted) | — | — | −7.1(2.2) | −11.4 to −2.8** |

*Note:* QoL scores are reported as mean and standard deviation (*SD*) and the differences as mean and standard error (SE). Differences were estimated as the difference between means with 95% confidence intervals (95% CI) and based on regression analysis. The regression analyses were adjusted for age as a continuous variable and gender, marital status, social support, length of education and comorbidities as categorical variables. Significance level with a *p* < .05 are marked with * and significance level with *p* < .001 are marked with **. One patient accepted the invitation but had no comments on QoL, and thus SEIQoL-DW scores for this patient were reported as missing.

Abbreviations: QoL, quality of life; CI, confidence interval.

**TABLE 3** The QoL categories and difference between patients receiving homecare versus no homecare

| Categories | No homecare (n = 249) | Homecare (n = 156) | Difference | 95% CI |
|---|---|---|---|---|
| Family | | | | |
| Patients (*n*) | 237 | 141 | | |
| QoL index | 24 (11) | 20 (10) | −3.8 (1.1) | −5.9 to −1.7** |
| Social activities | | | | |
| Patients (*n*) | 155 | 94 | | |
| QoL index | 14 (7) | 15 (8) | 0.4 (1.0) | −1.5 to 2.3 |
| Health | | | | |
| Patients (*n*) | 128 | 94 | | |
| QoL index | 13 (9) | 10 (9) | −3.0 (1.3) | −5.3 to −0.7* |
| Everyday life | | | | |
| Patients (*n*) | 87 | 39 | | |
| QoL index | 16 (9) | 16 (11) | 0.4 (2.0) | −3.6 to 4.3 |
| Leisure activities | | | | |
| Patients (*n*) | 75 | 39 | | |
| QoL index | 13 (6) | 13 (6) | −0.3 (1.2) | −2.7 to 2.1 |

*Note:* The QoL index is expressed as mean and standard deviation (*SD*), and patients refer to the number of patients selecting the specific category. The differences are expressed as mean and standard error (SE). Differences were estimated as the difference between means with 95% confidence intervals (95% CI) based on regression analysis. Significance level with a *p* < .05 are marked with * and significance level with *p* < .001 are marked with **. Index: QoL index was calculated by multiplying the QoL level by the QoL weight within each category. Each patient selected 3–5 QoL areas, and the QoL Index score from each category represents part of their overall QoL score.

Abbreviations: QoL, quality of life; CI, confidence interval.

patients without homecare. Individual QoL measured during acute admission was not associated to readmission in 30 days after discharge.

The SEIQoL questionnaire has been used in different populations to measure individual QoL. Browne and colleagues evaluated the individual SEIQoL in healthy elderly Irish people above 65 years of age and reported a mean score of 82 (*SD* = 12) (Browne et al., 1994). The QoL score was similar to the score we found in this study among older adult patients without homecare. In another study, people severely affected by multiple sclerosis (MS) rated their individual SEIQoL-DW score as mean 59 (*SD* = 26) (Giovannetti et al., 2016). This difference can be explained by the fact that the study population were

chronically ill people, had reduced mobility and were dependent on care from others. Furthermore, Lhussier et al. found a higher overall SEIQoL among older people when comparing them with people with chronic obstructive pulmonary disease (COPD) interquartile range (IQR) 81 (16) versus 75 (19) and additionally they found a negative correlation between the SEIQoL-DW score and impairment among older people with COPD (Lhussier et al., 2005). We found that older adult patients receiving homecare evaluated their overall QoL significantly lower 71 (*SD* = 21) versus 79 (*SD* = 17) than older adults without homecare. Our study thus supports the results from the studies above, indicating that being dependent on others' care is

related to a significantly lower individual QoL score. Moreover, our adjusted analysis showed that 'the experience of social support' influenced the overall QoL score. However, more research is required to explore this phenomenon further.

Important QoL categories can elaborate and individually nuance needs, capabilities and wishes when health professionals work purposefully towards patient's involvement, preferences and expectations. QoL evaluated during an acute admission includes more than just health-related areas of life. Similar to the findings from other studies (Giovannetti et al., 2016; Jakobsson Larsson et al., 2017; Matlabi & Ahmadzadeh, 2017), our study showed that 'Family', 'Health', 'Social activities', 'Everyday life' and 'Leisure activities' were important categories for individual QoL among older adults. 'Family' was essential, which may encourage healthcare professionals to prioritize relatives' roles during an acute admission by involving relatives and incorporate this knowledge into care and discharge planning. Liebzeit et al. (2019) reported that encouragement and support from family members facilitated recovery following hospitalization, and health professionals play a crucial role in supporting these family members in the myriad of responsibilities they have during an older family member's recovery.

Interestingly, we found that the category 'Health' was also evaluated lower among older adults receiving homecare. Thus, both 'Family' and 'Health' could be vital factors to focus on during hospitalization and discharge processes for older adults receiving homecare to support individual QoL. However, more research is needed to identify the nuances behind this lower evaluation of QoL from older adults receiving homecare. A qualitative study from the USA (a perspective from healthcare providers) exploring factors that influence care transitions following an acute admission found that improving the discharge process with instructions tailored to the patient's needs and promoting effective communication could increase the quality of care transitions (Abu et al., 2018). The recognition that some QoL categories are of particular importance may contribute to a more targeted focus in the discharge process and care of older persons.

The five most important QoL categories for older people warrant a more targeted focus in acute admission and care transitions. We suggest that health professionals improve the quality of care transitions by tailoring instructions to the patient's individual QoL and ensuring effective communication. As the family is essential for QoL among acutely admitted older adults, increased attention on involving relatives during admission and discharge is preferable. Emergency departments and homecare providers must focus on older adults dependent on homecare for ADL due to their lower QoL during acute illness. Quality of care might be improved by identifying, focusing and involving QoL categories in care among older adults receiving homecare.

The strengths of this study include a large number of interviews with 406 older adults, the inclusion of patients from three different EDs, the inclusion of patients with different medical and surgical complaints, and the inclusion of individuals from both city and rural areas. Another strength was the use of the SEIQoL-DW tool to

define and evaluate individual QoL. The SEIQoL-DW score provides nuance when determining individual QoL for example the level and weight assigned to a particular area are independent and change independently (Hickey et al., 1996). A patient may report to be well functioning in the area of 'Health' but give little importance to that area. The weighing procedure allows adjusting for the level of importance, and the overall QoL score was calculated from all three steps (identifying, rating and weighting). Thus, the SEIQoL-DW tool provides insight into older adults' QoL as they experienced it during admission with details that might not have been found through a predefined scale.

Limitations were that the SEIQoL-DW requires participants with the ability to think abstractly. Cognitively impaired patients were excluded from this study, and thus, the frailest patients from the ED may not be adequately represented. Not representing the frailest patients might have affected the overall SEIQoL-DW score since receiving homecare and ADL dependency were associated with a lower score. The overall SEIQoL-DW score was relatively high compared with other studies (Jakobsson Larsson et al., 2017; Matlabi & Ahmadzadeh, 2017).

Furthermore, it might be a limitation that the SEIQoL-DW tool had not been translated, validated and culturally adapted to Danish. The questionnaire was translated into Danish by experts, in cooperation with the authors. There is always a risk that translation does not capture all details in the original text. Considering cross-cultural and conceptual equivalence, we translated both the Swedish version (Jakobsson Larsson et al., 2017) and the English version (O'Boyle et al., 1992) of the SEIQoL-DW. An expert panel discussed discrepancies between the two Danish translations. Before conducting the interviews, we pilot-tested the SEIQoL-DW tool in three patients and made some minor adjustments subsequently. Hence, we argue that our translation was sufficient for this study.

Finally, performing the interviews during an unplanned admission to an ED may affect older patients' rating and defining of QoL due to increasing levels of worry and anxiety. Thus, some might have a higher score due to gratefulness for being helped and getting better, and some might have a lower score due to their worries and concerns about their illness.

## 6 | CONCLUSION

QoL involves more than just health-related areas of life for older patients during short acute admission to an ED. Receiving homecare was associated to significantly lower overall individual QoL scores and significantly lower ratings in the categories 'Family' and 'Health'. There was no association between individual QoL and readmission. 'Family', 'Social activities', 'Health', 'Everyday life' and 'Leisure activities' were selected as the five most important QoL areas. Support for these areas is vital in optimizing QoL among acutely admitted older adults. Our findings suggest that health professionals should be aware of the lower QoL and related categories among older acutely admitted adults receiving homecare.

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## APPENDIX A

### TRANSLATION SEIQOL-DW

A Danish version of the SEIQoL-DW has not yet been published. For use in this study, the Swedish version of SEIQoL was translated into Danish by an independent translator blinded to the original English version. Although Sweden and Denmark have comparable cultures, the translation focused on cross-cultural and conceptual equivalence rather than linguistic equivalence. Next, the original English version was translated to Danish by an independent translator. Subsequently, discrepancies between the two Danish translations were discussed by an expert panel (consisting of the first author, the main supervisor and a methodologist). The purpose was to reach consensus and to authorize the content and the translation of key concepts. Interest and questions about the final Danish SEIQoL-DW questionnaire used in this study can be addressed to the corresponding author.

## APPENDIX B

### QOL CATEGORIES AND EXAMPLES OF QUOTES

| Categories | Examples of quotes |
| --- | --- |
| Family | *Marriage, to have a good time together, spouses' illness Being with my family, concerns for my family, support from family* |
| Social activities | *Social activities, friends, looking at pictures of friends we have lost, visits from other people, neighbours, fellowship, help, support* |
| Health | *Limitation due to breathlessness, well-being, healthy life attitude to life, sadness, self-worth, loneliness* |
| Everyday life | *Home, feeling secure – or insecure at home, that we can stay in our house, staying in our cottage* |
| Leisure activities | *Hobbies, crossword, playing cards, knitting* |
| Nature | *Gardening, walks in the wood, being outside in nature* |
| Work | *Volunteering, work has been there for many years, work as a farmer* |
| Travelling | *Vacations, visited different places, camping* |
| Values of life | *Treat others properly, honesty, autonomy, respect for one's person, peace in the world* |
| Independence | *Manage without help, having my car, will not be a burden, can do what I want* |
| Physical activities | *Physical mobility, sports, exercise, gym* |
| Entertainment | *Watching a lot of TV whilst bedridden, watching sports, news, audiotapes* |
| Economy | *Economic freedom, security, do not owe anything to anyone* |
| Pets | *Dogs almost family, commitment, makes me want to get up* |
| Healthcare services | *Help from homecare, the welcome at the hospital, health professionals* |
| Thoughts about life | *There is life after death, have had a good life, thought about the future* |
| Religion | *Faith makes sense to my life, the church* |