Resources of Residents for Potential Transition From Long-Term Care to Community

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Key Words: residents; long-term care; potential transition to community; resources.

Summary. Background and Objective. Transition from long-term care to the community can have positive effects on residents’ health and quality of life and promote the feelings of happiness, safety, and independence. The aim of this study was to examine residents’ resources for potential transition to the community after residing in long-term care facilities.

Material and Methods. The study was conducted in 8 long-term care institutions for older persons of Kaunas county. The study population comprised 252 residents. The items contained in the interRAI Long-Term Care Facility assessment instrument were used to evaluate a consistent positive outlook, social activities, and discharge potential. Cognitive impairment was measured using the Cognitive Performance Scale. Activities of daily living were measured using the Activities of Daily Living Hierarchy Scale.

Results. More than 10% of the residents exhibited no cognitive impairment. One-third of the residents preferred to transition back to the community from their long-term care facility. Two-thirds expressed that they had familiar surroundings, which could be assumed to increase their feeling of safety at home. Social activities prevalent among residents included taking care of plants and walking outdoors. About 40% of the residents were physically independent in the activities of daily living. In spite of these resources, no residents were involved in a discharge process due to the lack of established nursing and social care services and transitional care plans.

Conclusions. With well-organized community services, some residents in long-term care facilities may have enough resources to live in the community.

Introduction

Providing person-centered care accompanied by an individualized care plan has become the focus of home and community care service provision for older people in contrast to expensive long-term care facilities (LTCFs) (1). Older adults may enter LTCFs as a result of functional or cognitive decline or due to the lack of home care support services (2). Cognitive impairment may adversely affect the physical function, as measured by dependence in the activities of daily living (ADLs) (3, 4). Residents admitted to LTCFs are more likely to be older, have a diagnosis of dementia and/or depression, and be placed in special care units for Alzheimer’s disease (5). Geriatric syndromes are also associated with an increased risk of admission to LTCFs (6).

Facilitating successful transition back to the community after entry to long-term care is a serious challenge to social and health care systems. In Lithuania, transition back to the community is rare, and a declining trend has been observed: in 2011, a lower percentage of the long-term care residents, i.e., 6.0%, transitioned back to the community (7) as compared with 6.6% in 2010 (8), 7.2% in 2006, and 10.8% in 2003 (9).

Prioritization of residents who may thrive from transition back to the community must consider personal, health, and functional conditions that increase the probability of successful discharge (10). Resident resources are essential to support this transition. Resources are defined as “the capability, initiative and means of doing something” (11). This is a multifaceted concept, which has previously been defined by Tornstam in 1982 as well as Diener and Fujita in 1995 (12, 13). In the health and nursing context, resources have been extended to include “factors that support coping in everyday life” (14–16). Moreover, when applied to older adult long-term care residents, resources encompass the inner power of cognitive, psychological, social, and physical function to manage everyday challenges.

Transition from an LTCF to the community refers to the process or sometimes a state program that helps individuals living in institutions move back to their homes. During transition, residents should receive assistance not only in moving to their home
but also in setting up support services necessary to enable them to function as independently as possible. The places of living may include a private home or apartment residence where they live alone, with a family, or friends, a group home, an assisted living facility, or another residential setting (17).

In a Norwegian study, long-term care residents lost the opportunity to develop their own private lifestyle although they had single rooms and home-like interior decor. The authors suggested to define the living room as a clear public area and to give the residents chances to develop a more private lifestyle by alternating between their private rooms and the public common living room (18). In Lithuania, only 5% of rooms in LTCFs are single-occupancy rooms, whereas 31% are 2-bed rooms and 28% are 4-bed rooms (8). The majority of residents wish to be cared for in the community. In Kaunas district, Lithuania, Hitaité and Spriegenė found that 79.2% of the residents preferred to be cared at their own homes, while only 17.4% preferred to be cared for in a hospital (19). It is important to note, however, that only 2.8% of the residents in this study preferred to receive care in an LTCF.

In a Californian study, nearly one-fifth of residents and proxies believed that the resident had the ability to transition from an LTCF, of whom almost one-third thought that transition would be feasible and almost half of them indicated preference for transition after discussing potential living arrangements and services (21). The most common benefits of living in the community indicated by residents were better quality of life, feeling happier or more content, feeling more independent, and having better health, increased security and safety (22).

Residents and their caregivers must be apprised of appropriate community resources available and encouraged to participate in all the stages of the transitional care planning process (23). An LTCF located in the regions with a greater ratio of home-to community-based services has been reported to have higher community discharge rates (24). Residents and proxies who believed that transition was feasible and were serious about transition were most likely to work closely with community agencies on the complicated tasks of securing housing and arranging for services (21). Americans Scott and Corley emphasize the importance of the availability of program services to residents during the initial transition period back to the community and that programs continue to provide support after the resident has settled back into the community. For the majority of residents, transition would not have been possible without the continued support services they received after they transitioned back to the community (22).

In Lithuania, long-term care is provided within the health care system, focused on long-term care for chronically ill and persons with disabilities, and within the social care service system, which plays the main role in caring for dependent people, who are in most cases older persons. LTCFs are affiliated to the Ministry of Social Security and Labour in Lithuania. Furthermore, institutionalized nursing home care is more expensive on average than home- and community-based care (25).

The aim of this study was to examine residents’ resources for potential transition to the community after entry to LTCFs.

Material and Methods

Study Design and Population. The study was conducted at 8 LTCFs for older persons of Kaunas county, Lithuania. The criteria for LTCF inclusion into the study were a long-term care institution for elderly, long-term services rendered, and residents’ registration and documentation provided. Every third resident (252 of the 728 residents) was selected from the lists provided by an LTCF administration.

Study Organization. Every resident was individually informed about the study by the researcher. The residents were questioned and observed with no interventions, and the data and the time were coordinated with the resident’s day schedule. The staff of all the 8 LTCFs provided a respective list of the residents and specified the residents who were unable to communicate with the researcher due to their health condition or cognitive impairment (16 residents, 6.3% of the totally selected residents). The data of these residents were gathered from secondary information sources.

Measurements. The data from the interRAI LTCF assessment instrument, a comprehensive standardized tool for evaluating long-term care residents, were used in the current study. The sections of the questionnaire interRAI LTCF (version 09, 2006) were used to gather information from other variables in the study. The study methodology was verified in the Guide for Use of the interRAI LTCF Assessment Form interRAI, 2006 (26). The questionnaires were translated by 2 independent translators from English into Lithuanian using the back translation method. The most discussed question-
naire items were analyzed, and the best formulations were offered. Official permission was received from the interRAI Organization (27).

The Cognitive Performance Scale (CPS) and the Activities of Daily Living Hierarchy Scale (ADLHS), embedded within the interRAI LTCF questionnaire, were used to assess cognitive and physical functioning, respectively. The CPS (28) classifies all residents into 7 levels of cognitive performance ranging from the score of 0 (intact) to 6 (very severe impairment). The ADLHS (14) scores are summed for 4 ADL variables: personal hygiene, toilet use, locomotion, and eating. ADLs were assessed categorizing the residents as 1) independent, 2) supervision, 3) limited, 4) extensive 1 (guided maneuvering of limbs, physical guidance without taking weight), 5) extensive 2 (a resident performs 50% or more of subtasks), 6) dependent, and 7) total dependence.

Other variables of interest employed in this study and available in the interRAI LTCF questionnaire included demographic information, such as gender, age, and marital status, and the data of institutionalization. Education was categorized as follows: primary, secondary, vocational or college, higher, and unknown education.

The ADL self-performance was assessed in bathing, personal hygiene, dressing upper body, dressing lower body, walking, locomotion, transferring to the toilet, toilet use, bed mobility, and eating. The residents were categorized as independent, independent (setup help only), supervision, limited assistance, extensive assistance, maximal assistance, total dependence, and activity did not occur.

A consistent positive outlook was assessed from the variables measuring psychological well-being as yes or no.

Social activities were assessed by the average of typical time involved and were grouped into categories: most (more than two-thirds of daytime), some (from one-third to two-thirds of time), little (less than one-third of time), and none. Different kinds of social activities were crafts and art, gardening, music or singing, discussing/reminiscing about life, walking outdoors, watching TV or listening to the radio, and spiritual or religious activities. Discharge potential was assessed by yes or no with the following alternatives: 1) expressed preference to return to the community, 2) a support person in the community, and 3) housing available in the community.

Statistical Analysis. The analysis was carried out using the SPSS version 15.0 (29). The analyses included the use of the descriptive statistics, the $\chi^2$ test, the $z$ criteria, and the Spearman correlation to estimate the relations between the ADL and CPS scores. Possible independent factors were evaluated using multivariate logistic regression, calculating the odds ratio and 95% confidence interval. The multivariate logistic regression analysis was carried out when significant differences were obtained by applying univariate logistic regression analysis. A $P$ value of $<0.05$ was considered as statistically significant for all the tests.

Ethics Consideration. The study protocol was approved by Kaunas Regional Biomedical Research Ethics Committee (No. BE-2-34 and No. P1-104/2008).

Results

The study population comprised 252 residents. There were 158 women (62.7%) and 48 men (37.3%). The mean age of the residents was 75.4 years (SD, 13.1). More than half of the residents (55.2%) were widowers. The majority of the residents (90.5%) were admitted to LTCFs due to health problems. The mean length of stay in the LTCFs at the time of assessment was 5.4 years (SD, 5.8). The residents aged 75 years and older accounted for the largest age group (61.9%). Nearly two-thirds (63.1%) of the residents entered an LTCF from private homes.

No cognitive impairment was observed in 23.4% of the men and 7.0% of the women ($P<0.05$) (total 13.2%). Severe and very severe cognitive impairment was more prevalent among the women (34.8%) than the men (25.2%). The mean score of the CPS was 2.9 (SD, 1.8). Cognitive decline among the residents was associated with dependence in ADLs ($r=0.5, P=0.001$).

One-third (33.5%) of the residents preferred to transition to the community from LTCFs, and most of them were women. The majority (67.2%) of the residents who preferred to transition to familiar surroundings in their community reported the availability of community-based housing. However, only 3% reported the availability of a support person who was positive regarding the resident’s discharge and maintenance in the community. Almost half (46.6%) of the residents who were independent or needed supervision in ADLs exhibited potential to return to the community. The residents who expressed the desire to return to the community were more likely to walk without any assistive devices. The residents who showed a consistent positive outlook were also more likely to return to the community. Table 1 presents residents’ opinions and characteristics for potential discharge and transition back to the community. Although there were no residents identified as candidates for discharge to the community during the period of data gathering, the residents did express this as a possibility.

The residents’ independence in ADLs was associated with involvement in activities, such as taking care of plants (OR=5.4; 95% CI, 1.34–21.85; $P=0.02$) and walking outdoors (OR=9.09; 95% CI, 0.22–408.3); $P=0.04$). The residents who expressed the potential discharge and transition back to the community did not show a difference in age compared to the residents who did not express the potential discharge and transition back to the community.

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Independence in ADLs showed a statistically significant positive association with involvement in social activities, meaning that the residents who were more independent could be better integrated in familiar surroundings at follow-up. The odds ratios in Table 2 indicate social activity preferences and involvement with independence in ADLs.

Differences in ADLs among the residents are displayed in Fig. The results demonstrated that 37.7% of the residents were independent in ADLs. The mean score of the ADLHS was 2.1 (SD, 2.2) (0, independent; 6, total dependence). The men were more likely to be independent in ADLs than the women (46.8% vs. 33.5%). Accordingly, ADL dependence was more common among the women than the men (12.0% vs. 7.4%). The residents were independent in ADLs such as eating (82.5%) and bed mobility (81.0%) and dependent in bathing (31.3%), toilet use (27.8%), and transfer to toilet (27.0%). The residents with a higher educational level were more independent in ADLs ($P<0.05$).

Table 1. Distribution of Residents by Potential Discharge From Long-Term Care Facility and Available Housing in Community, Performing Activities of Daily Living, Mode of Locomotion, and Consistent Positive Outlook

<table>
<thead>
<tr>
<th>Domain</th>
<th>Return to Community</th>
<th>Remain in Long-Term Care Facility</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>13 (22.4)</td>
<td>57 (49.6)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>45 (77.6)</td>
<td>58 (50.4)</td>
</tr>
<tr>
<td>Available housing in community</td>
<td>Yes</td>
<td>39 (67.2)</td>
<td>28 (24.3)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>19 (32.8)</td>
<td>87 (75.7)</td>
</tr>
<tr>
<td>Activities of daily living (ADL)</td>
<td>Independent, supervision</td>
<td>27 (46.6)</td>
<td>68 (59.1)</td>
</tr>
<tr>
<td></td>
<td>Extensive (1, 2)</td>
<td>26 (44.8)</td>
<td>27 (23.5)</td>
</tr>
<tr>
<td></td>
<td>Dependent, totally dependent</td>
<td>5 (8.6)</td>
<td>20 (17.4)</td>
</tr>
<tr>
<td>Mode of locomotion</td>
<td>No assistive devices</td>
<td>52 (89.7)</td>
<td>77 (67.0)</td>
</tr>
<tr>
<td></td>
<td>Used assistive devices</td>
<td>6 (10.3)</td>
<td>38 (33.0)</td>
</tr>
<tr>
<td>Consistent positive outlook</td>
<td>Yes</td>
<td>32 (55.2)</td>
<td>31 (27.0)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>26 (44.8)</td>
<td>84 (73.0)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>58 (33.5)</td>
<td>115 (66.5)</td>
</tr>
</tbody>
</table>

Values are number (percentage). *Residents with severe cognitive impairment were excluded, and the data of 173 residents were further analyzed; †$P<0.005$ compared with residents’ request to return to the community. ADL Extensive (1), guided maneuvering of limbs, physical guidance without taking weight; ADL Extensive (2), a resident performs 50% or more of subtasks.

Table 2. Likelihood of Having Independent Activities of Daily Living by Social Activity Involvement (Multivariate Logistic Regression)

<table>
<thead>
<tr>
<th>Activity Preference and Involvement</th>
<th>B</th>
<th>OR</th>
<th>95% CI</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crafts and art</td>
<td>0.5471</td>
<td>1.73</td>
<td>0.480–6.21</td>
<td>0.4</td>
</tr>
<tr>
<td>Plants</td>
<td>1.687</td>
<td>5.40</td>
<td>1.34–21.85</td>
<td>0.02</td>
</tr>
<tr>
<td>Music or singing</td>
<td>0.627</td>
<td>1.87</td>
<td>0.55–6.23</td>
<td>0.3</td>
</tr>
<tr>
<td>Discussing/reminiscing about life</td>
<td>−0.343</td>
<td>0.71</td>
<td>0.28–1.74</td>
<td>0.4</td>
</tr>
<tr>
<td>Walking outdoors</td>
<td>2.207</td>
<td>9.09</td>
<td>3.22–25.68</td>
<td>0.001</td>
</tr>
<tr>
<td>Watching TV or listening to radio</td>
<td>1.036</td>
<td>2.82</td>
<td>0.98–8.12</td>
<td>0.059</td>
</tr>
<tr>
<td>Spiritual or religious activities</td>
<td>0.348</td>
<td>1.42</td>
<td>0.60–3.40</td>
<td>0.3</td>
</tr>
<tr>
<td>Wish to return to the community</td>
<td>1.771</td>
<td>5.42</td>
<td>1.95–14.97</td>
<td>0.001</td>
</tr>
<tr>
<td>Consistent positive outlook</td>
<td>1.690</td>
<td>5.42</td>
<td>1.95–14.97</td>
<td>0.001</td>
</tr>
<tr>
<td>Average of time involved in social activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From 1/3 to 2/3</td>
<td>−0.283</td>
<td>0.74</td>
<td>0.22–2.46</td>
<td>0.1</td>
</tr>
<tr>
<td>Less than 1/3</td>
<td>−0.177</td>
<td>0.84</td>
<td>0.25–2.82</td>
<td>0.1</td>
</tr>
<tr>
<td>None</td>
<td>−1.626</td>
<td>0.20</td>
<td>0.05–0.85</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Dependent variable was independent activities of daily living. Adjusted for age. OR, odds ratio; CI, confidence interval; B, regression coefficient.

The compatibility of the model with data $\chi^2=145.076$, $df=13$, $P=0.001$; the suitability of the model – the determination coefficient – $R^2=0.589$; the model predicted with an accuracy of 81.3%. 
Discussion

Our main finding was that in long-term care, there were residents with no cognitive or functional impairment, who were, therefore, suitable candidates for transition to their homes.

Residents’ cognitive ability is important to ensure safe living at home in the community. In this study, more than 13% of the residents had no cognitive impairment. The mean score of 2.9 (SD, 1.8) on the CPS is close to that of 2.8 (SD, 1.7) reported by Phillips et al. (30). If the absence of cognitive impairment is the only criteria for discharge from an LTCF, then more than 10% of the residents in our study would be eligible for discharge. Cognitive decline was significantly associated with dependence in ADLs, which means that the degree of cognitive impairment in connection to the ability of ADLs should be considered in each discharge situation.

Living in the community can mean improved health and quality of life, as well as the feelings of happiness, independence, and safety for many older people (22). One-third of the residents preferred to transition from an LTCF back to the community. Two-thirds reported that they had familiar surroundings, which could be assumed to increase their feeling of safety at home. Providing community-based home care and social support for individuals and members of their support network are critical to enable the individual to not only transition back to the community but to be maintained there as well in spite of weakness in ADLs or a future functional decline. It can be assumed that those who were psychologically ready to return back to their homes may have resources available to manage with support from informal and formal care networks. Professionals need to consider both the resources of such individuals and their quality of life and happy feelings when making discharge-related decisions.

Living at home in the community usually means more social activities than living in a long-term institution, which easily institutionalizes residents (1). The residents’ activities were associated with taking care of plants and walking outdoors. These activities are possible in LTCFs, but as long as the resident continues to engage in these social activities, he or she also has other functional resources to support living at home. Discussing/reminiscing about life as well as watching TV or listening to the radio can be seen as quite passive activities; on the other hand, walking outdoors and taking care of plants are more physically engaging activities. These social activities also strengthen the cognitive, psychological, and physical functions.

The results of this study showed that independence in ADLs had a statistically significant positive association with involvement in social activities, i.e., the residents who were more independent could be better integrated in familiar surroundings. In communities, social activation and quality of life could be strengthened and supported through community social and health care services. In Lithuania, LTCF team members, including nurses, social workers, assistant social workers, and physicians provide interdisciplinary care for residents (7), but this care can be developed further.

About 40% of the residents were physically independent in ADLs. The most common independent ADLs included eating and bed mobility, while the most common dependent ADLs were bathing, toilet use, and transfer to the toilet. When an older person becomes frail, he or she most often loses activities beginning with walking and bathing, followed by getting out of bed, dressing, toileting, and, finally, eating (31). If only physical independence is considered a prerequisite for transition to the community, then many residents independent in ADLs may be able to manage at home. However, when the residents’ discharge is planned, not only ADL abilities but also all the resources should be assessed. An older person can be physically active but not exhibit the cognitive function that is high enough to make appropriate decisions and manage safely at home.

Residents in LTCFs are more dependent on professionals’ help in ADLs when compared with persons residing in the community (32). In this study, most of the residents were admitted to LTCFs due to health problems requiring professional help. According to the Law of the Minister of Social Security and Labour of the Republic of Lithuania passed in 2006 (33), social workers assess older persons’ social and physical dependence. Long-term care services are offered to socially and physically dependent older adults. Therefore, older person’s cognitive, psychological, social, and physical needs should be
assessed and match services that would be most appropriate to meet those needs. In Lithuania, capable residents can voluntarily transition from LTCFs to the community if the administration of an LTCF is assured that the resident will have proper living conditions and receive necessary services in the community to support the residents' ability to live independently (34).

In the United States, transition initiatives are targeted to LTCF residents that have been in an LTCF for 6 months or longer and who express the desire to live in the community. Such initiatives include individual assessments to determine the individual's ability to live in the community, one-on-one case management, funding for one-time transition costs (e.g., security deposits), and person-centered planning to ensure that service needs are met in the community (35). In this study, the mean period the residents lived in LTCFs was approximately 5 years. This is a long time, and it can be assumed that during this time, residents become accustomed to living in an LTCF. Effective rehabilitation and community service arrangements for discharge should be started as soon as possible after older people are admitted to an LTCF.

Residents’ transition from LTCFs to the community is a complex process. If the discharge process is traumatic to residents, there is a warning for residents' rights facing on involuntary discharge from a LTCF and for stress created by the discharge process (36). Discharge planning must be a resident-centered, interdisciplinary process that begins from the initial assessment of patient's potential needs at the time of admission and continues throughout the patient's stay. Ongoing consultation with the resident's care team and reassessment of the resident's changing medical functional, social, and cognitive capabilities should assure that comprehensive needs of the resident are addressed (23).

The discharge process must be well organized, and all the aspects, including nursing care, social resources, and financial implications, must be taken into account. In this study, 33.5% of the residents preferred to transition to the community, but during the period of data gathering, no residents were involved in a potential discharge process. This may be a result of the lack of established home care support services and not clearly identified transition care planning processes. The possibilities of transition care planning in long-term care must be well organized, flexible, and practicable, especially if the goal is that residents could live as long as possible at home and attain the highest quality of life possible.

Conclusions
Although the majority of the residents admitted to LTCFs exhibited multiple chronic illnesses, some who preferred to transition from LTCFs back to the community had enough resources. Important factors to support return to familiar surroundings in the community were the residents’ sufficient cognitive functioning to live alone, their personal desire to live in the community, and availability of services and support to address ADL needs where they could not manage independently. Locomotion without or with assistive devices and a social activity environment were seen as facilitators to transition to the community. Successful care transitions back to the community should be integrated between the long-term care and community-based social and nursing home care systems. Effective collaboration among long-term care and home care providers requires an individualized transition plan that guides patient-centered care, reflects the priorities of the resident and the family, and meets the needs of persons living with chronic conditions.

Statement of Conflict of Interest
The authors state no conflict of interest.

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29. Statistical Package for Social Sciences, SPSS 15.0 version, Inc.


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