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Original Study

An Administrator's Perspective on the Organization of Physical Activity for Older Adults in Long-Term Care Facilities

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A B S T R A C T

Background: The positive influence of physical activity (PA) on health is well documented. Even at old age, PA remains useful but participation in PA decreases with age. In long-term care facilities (LTCFs), PA appears to be reduced to a bare minimum. Because administrators have a key role in developing the care policy of LTCFs, it is important that they support the organization of PA in LTCFs.
Objective: The main objective of this mixed-method study was to identify motivators and barriers for organizing PA in LTCFs according to administrators. A secondary goal was to examine the knowledge of the World Health Organization (WHO) guidelines regarding PA and to reveal potential motivators and barriers for the implementation of the guidelines.
Methods: First, 24 administrators completed semistructured interviews. Data were analyzed using the deductive approach of qualitative content analysis. The obtained motivators and barriers were categorized on 3 different levels (intrapersonal, interpersonal, and community) according to the socioecological model by 2 independent reviewers; conflicts were resolved with a third researcher. Next, 127 administrators of Flemish (Belgium) LTCFs completed an online questionnaire survey containing open-ended, unique, and multiple choice questions regarding the LTCFs, PA, and the WHO guidelines, as well as statements (scored on a 5-point Likert scale) regarding perceived motivators and barriers for organizing PA sessions in the LTCF.
Results: In the qualitative component, the administrators reported 31 motivators and 24 barriers for organizing PA in the LTCF. In the survey, maintaining or enhancing general health of the residents (98%) and improving the psychological well-being of the residents were marked as key motivators at the intrapersonal level. The administrators (97%) were convinced that PA is a useful way to spend time for LTCF residents. Encouraging social contact (94%) and countering loneliness (86%) are the motivators cited at the interpersonal level. At the community level, the infrastructure of the facility (91%) and adequate and sufficient material (88%) are the main motivators. The barriers that were presented to the participants were scored as less important. The majority of the administrators (83%) are not familiar with the WHO guidelines for PA; 70% of the participants believe that the guidelines are useful, but only 40% is convinced that it is realistic to implement the guidelines in an LTCF.
Conclusions: This study described different motivators and barriers for administrators to organize PA in LTCFs. Contrary to other studies, lack of staff, lack of adequate equipment, and lack of financial resources were rejected as potential barriers for organizing PA. Despite the fact that administrators were not familiar with the WHO guidelines for PA, they believed that the guidelines are useful. The participants reported several barriers for implementation of the guidelines. Administrators of LTCFs are motivated to implement the guidelines if PA can be integrated in daily activities and education of LTCF staff regarding PA is provided.

Although the advantages of physical activity (PA) on physical function and quality of life for residents in long-term care facilities (LTCFs) are well documented,[1] the level of PA in LTCFs is rather low.[2] A German study showed that residents in LTCFs barely meet the World Health Organization (WHO) recommendations regarding PA for older

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adults.[3,4] Moreover, the frequency, duration, and content of the PA sessions are often not sufficient to be effective.[4] Sedentary behavior in older adults leads to a reduction of mobility, which can cause falls, fractures, and loss of function.[5] PA can counter major geriatric conditions such as frailty[6,7] and sarcopenia.[8] The positive effects of PA on chronic conditions such as hypertension,[9] osteoporosis, and type 2 diabetes[10] are known. PA is beneficial in the primary and secondary prevention of coronary heart disease in older adults.[10] Furthermore, PA has positive effects on mental conditions such as depression[11] and dementia.[12] A recent meta-analysis confirmed that physical rehabilitation improves activities of daily living in older people living in LTCFs, although a small overall effect was found, and the modalities of the best intervention remain unclear.[13]

PA can be defined as unstructured activities incorporated in daily life, while "physical exercise," which can be considered as a subcategory of PA, encompasses structured and planned activities.[14] Here, the WHO guidelines are used as reference guidelines for PA because it is a part of the Global Strategy on Diet, Physical Activity, and Health (Resolution WHA57.17) and the Resolution on Prevention and Control of Noncommunicable Disease (Resolution WHA61.14). These resolutions urge governments to develop national PA action plans and policies.[15] Although the WHO guidelines for PA in older adults are not specifically designed for nursing home residents, they correspond well with the PA recommendations as proposed in a comprehensive literature review by Weening-Dijksterhuis et al.[1]

Barriers and motivators for PA for community-dwelling and institutionalized older adults are well described.[16–18] A recent literature study of Benjamin et al[19] enumerated various barriers to PA for residents, residents' family and/or friends, and staff members in LTCFs. In an earlier qualitative study of the same research group, administrators described staffing and funding constraints as major barriers for organizing PA in LTCFs, as well as challenges in the built physical environment of the LTCF[20] but did not focus on potential motivators. In a study by Kalinowski et al,[4] barriers and motivators for PA in LTCFs were investigated in administrators of 40 nursing homes in Germany and their residents. The results of this study suggested mainly barriers and motivators to PA regarding structural characteristics (eg, the presence of a garden or an outdoor area with places to sit) of the LTCF and the PA services that were provided. Barriers and motivators for PA are not necessarily related to the physical environment of the LTCF but can also occur at the level of LTCF staff and/or the interaction between different disciplines. The socioecological model (SEM) of Mc Leroy is, therefore, an appropriate framework because it allows structuring the different barriers and motivators on 3 different levels: intrapersonal (eg, psychological factors), interpersonal (eg, social support), and community level (environmental and policy factors).[21]

The main objective of this mixed-method study was to identify barriers as well as motivators for organizing PA in LTCFs according to administrators on the different levels of the SEM. A secondary goal was examining their knowledge of the WHO guidelines regarding PA and to reveal potential motivators and barriers for the implementation of these guidelines.

Methods

Overview of Research Design

Because relevant literature data on motivators and barriers for PA perceived by administrators of LTCFs were scarce at the initiation of this project, a mixed- method study design using an across method triangulation[22] (by combining qualitative and quantitative data collection) was adopted. First, a qualitative study was conducted by interviewing 24 administrators of LTCFs. In a second step, the results of this qualitative study were used to create a survey instrument for the quantitative phase. The purpose of this approach was to obtain motivators and barriers for organizing PA from the viewpoint of administrators, who do not directly provide care to the residents, but have end-responsibility for the care that is delivered to and the well-being of their LTCF residents. This study was conducted between January 2012 and March 2014 in Flanders, the Dutch-speaking part of Belgium, where 58% of the Belgium population resides. The institute's Medical Ethics Committee (institutional review board 016) confirmed that this study was exempted from approval (decision number 2012/264).

Preliminary Phase

The SEM of Mc Leroy was chosen as a framework to categorize the obtained motivators and barriers at the different (intrapersonal, interpersonal, and community) levels.

Phase 1: Qualitative Research

Respondents

Twenty-four Flemish administrators of LTCFs (11 female and 13 male) participated in the qualitative part of this study (Table 1). Inclusion criteria were speaking Dutch and being employed for at least 50% of a full-time equivalent during the previous 6 months as an administrator (manager) of an LTCF in Flanders. Administrators of an LTCF exclusively for residents with dementia were excluded.

Recruitment

A multistage stratified random-sampling was performed on a public data base from the Flemish Ministry of Welfare and Health including all Flemish LTCFs in order to recruit the administrators (Figure 1). A priori 20 to 24 administrators were aimed to be included as recommended by Creswell.[23] For logistic reasons, 4 out of 5 Flemish provinces were selected to recruit LTCFs: Vlaams-Brabant, Limburg, Oost-Vlaanderen, and West-Vlaanderen (counting together 457 LTCFs in Flanders, excluding private for profit LTCFs). In the qualitative phase, only public and private not-for-profit LTCFs were selected because these represent the largest proportion of the LTCFs in Flanders. Forty-nine LTCFs were selected at random from the database, stratified according to the proportion of the different types of LTCFs in each province (Figure 1). After interviewing 24 administrators, we noticed that during the last 4 interviews, no new elements appeared. We, therefore, concluded that theoretical saturation was reached; no further interviews were conducted.

Table 1
Characteristics of the Participants

Variables	Semistructured Interviews (N = 24)		Survey (N = 127)	
Gender	Male	Female	Male	Female
N	13 (54%)	11 (46%)	67 (53%)	60 (47%)
Mean age (years)	49 ± 7	43 ± 11	50 ± 7	44 ± 8
Education degree				
Bachelor	9 (37%)	7 (29%)	27 (21%)	22 (17%)
Master	4 (17%)	4 (17%)	36 (28%)	37 (30%)
Other	0	0	4 (3%)	1 (1%)
Length of employment in the LTCF (years)	9 ± 7	9 ± 9	8 ± 9	12 ± 8
Years of working experience in geriatrics or LTCF	17 ± 8	15 ± 11	18 ± 9	20 ± 9
FTE appointed in the LTCF				
100%	12 (50%)	10 (42%)	67 (53%)	56 (44%)
<100%	1 (4%)	1 (4%)	0	4 (3%)
LTCF type				
Public	3 (13%)	6 (25%)	33 (26%)	29 (23%)
Private not-for-profit	9 (38%)	6 (25%)	30 (24%)	26 (20%)
Private for profit	0	0	4 (3%)	5 (4%)

FTE, full-time equivalent.