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Research paper

Factors associated with unsettled relationships between residents and care staff in long-term care facility

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ABSTRACT

Introduction: Unsettled relationships (UR) understood as open or covert conflicts among residents or between residents and staff play a significant role in patient's well-being in long-term care facility (LTCF) as well as in staff's job satisfaction.
Material and methods: The aim of this study was to assess the prevalence and identify factors associated with UR among residents (RR), URs between residents and staff (RS) and staff's frustration in contact with resident (SF). This cross-sectional study was conducted over 288 residents in one of the biggest Polish LTCF, using the interRAI-LTCF questionnaire and logistic regression analysis.
Results and conclusions: In our study, UR were observed in 28.8% of LTCF residents, with the highest frequency of RR (20.5%), followed by RS (19.4%) and SF (17.4%). We found that men demonstrated higher than women risk of the analyzed UR. Interestingly, moderate to severe cognitive impairment decreased the odds of RR and SF. We used to think that dementia and psychiatric diseases are the main predictors of conflict behaviors in LTCF setting. However, our findings show that behavioral, psychotic and depressive symptoms are the major factors which enhance the risk of UR in LTCF. Hence, we recommend clinicians to focus on better detecting, monitoring and controlling these symptoms to prevent the URs in LTCF. The second important study results is that some somatic diseases may also independently increase the risk of UR between the residents and the staff.

1. Introduction

The unsettled relationships (UR) among residents and between resident and staff play a significant role in patients' quality of life in long-term care facility (LTCF). There is evidence proving that the UR among the residents and between the resident and the staff decrease the resident's well-being and level of social functioning as well as increase the use of antipsychotic drugs by the resident who conflicts with others [1–3].

UR in LTCF are defined as hidden or open conflicts among the residents or between the residents and the staff [2]. UR can be displayed in resident's repeated criticism/complains against other resident/staff, as well as openly expressed conflict, or anger with other resident/staff [2,3]. Literature review demonstrates that UR in LTCF need attention and examination as they are related to residents' wrong adaptation to the institution, lower social engagement, and increase the risk of residents' depression, overdose of sedating drugs, and mortality [1–5].

UR between LTCF resident and staff can also be displayed in staff reporting persistent frustration while giving care. Working in LTCF setting is a challenge and triggers significant stress as the LTCF population consists of the most vulnerable group of patients due to their physical disability, comorbidity and cognitive impairment. The study results demonstrate that conflicts against care staff by LTC residents are occurring primarily during basic care activities such as dressing, changing, bathing, feeding and turning [1,6,7]. There is evidence [8,9], that resident's hostility and criticism against the staff increase job related stress and

Abbreviations: ADLh, Activities of Daily Living Hierarchy scale; BMI, body mass index; CHF, congestive heart failure; CPS, Cognitive Performance Scale; DRS, Depression Rating Scale; LTC, long-term care; LTCF, long-term care facility; SF, staff's persistent frustration; RR, unsettled relationships among residents; RS, unsettled relationships between resident and staff; SM, sclerosis multiplex; UR, unsettled relationships; UTI, urinary tract infection.

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psychological workload resulting in higher risk of absenteeism and burnout syndrome. Moreover, researchers suggested that the caregiver's characteristics may also be related to the UR, such as the level of work experience, communicative skills, the occurrence of burnout symptoms, the training in aggression management as well as the frequency of supervision [8–10].

Several studies provided following factors, related to LTCF resident, which increase risk of UR in LTCF: male sex, age, physical independency in activities of daily living (ADL), psychotic symptoms (ex. abnormal thought process, delusions, hallucinations), behavioral symptoms, symptoms related to mental disorders or dementia, and signs associated with some somatic diseases or premorbid personality [10–15].

Since the past decade, in many countries, an emerging interest of researchers in UR among residents and between resident and care staff in LTCF's has been observed. The study results suggest that UR have significant implications for the safety of residents and/or staff, possibly the quality of treatment and present challenge for the care organization [1–3,9,10]. So far, the UR have been scarcely investigated in Polish LTCFs. The topic of UR has been examined mainly in the context of verbal and physical aggression among residents (RRA) and between residents and staff (RSA), as well as in the studies on independent risk factors for poor social engagement among LTCF residents. Therefore, in our study we focused more on disorders of relations between residents and staff. The aim was to assess prevalence and identify the factors associated with the following URs:

- conflict with or repeated criticism expressed by resident verbally or with physical gestures to other resident (RR – URs of R-R type);
- conflict with or repeated criticism expressed by resident verbally or with physical gestures to staff member (RS – URs of R-S type);
- staff's persistent frustration in contact with resident (SF).

2. Methods

2.1. Setting and sample

The study was conducted in LTCF in Krakow (Poland) – institution providing round-the-clock medical and nursing care to 510 residents. This LTCF comprises of three types of wards: psychogeriatric ward, palliative care ward and long-term care (LTC) ward. All 354 residents admitted to LTC ward were recruited to the study. However, to address the aim of this analysis, we excluded from analysis 52 residents, who presented lack of a discernible consciousness and/or were in coma, since they were not able to interact with others, communicate or express their thoughts, and participate in any social activity. Other 14 exclusions were due to lack of data on analyzed factors. The final sample included 288 residents aged 31–94 years, with 42 persons below age of 60 (14,6%) and 138 persons above age of 80 (47,9%). We have obtained the approval from the Jagiellonian University Ethics Committee for the study.

2.2. Study design

It was a cross-sectional study conducted in 2013 during 8-month period. The data were collected based on assessments performed by nurses, who passed standardized training in use of the InterRAI-LTCF questionnaire – an InterRAI Long-Term Care Facilities Assessment System (www.interrai.org). The nurses completed the questionnaires based on 3-day observations of residents whilst in their routine care, and information obtained from family members and other staff during daily team meetings. Such daily team meeting in the unit is performed to discuss all issues about each resident's medical conditions, health care needs, care plan and possible difficulties, including the presence of different types of UR. InterRAI-LTCF is a tool which enables a comprehensive assessment of LTCF residents covering their functional status, health care needs and social activity preferences. The questionnaire has been validated and proved to be reliable in several European countries [15,16]. InterRAI-LTCF questionnaire has been translated into Polish and passed cross-cultural adaptation keeping the rigorous format of translation methodology. The tool consists of several questions asking about social and demographic characteristics, medical diagnoses and symptoms, care and treatment programs. Due to low prevalence of some diseases, e.g. hemiplegia, paraplegia, quadriplegia, and sclerosis multiplex (SM), we grouped them into one category of "neurological disease". Anxiety disorder, bipolar disorder and schizophrenia fed one variable "psychiatric disorders other than depression". InterRAI-LTCF comprehends also different types of behavioral symptoms (such as wandering, verbal or physical abuse, socially inappropriate behavior, sexual inappropriate behavior and resistance to prescribed care or treatment) and psychotic symptoms (like hallucinations, delusions, abnormal thought process). Moreover, the questionnaire contains items concerning different types of UR among residents (RR) and between resident and staff (RS) that may be manifested by resident's repeated criticism against staff or other resident, as well as staff expressing persistent frustration in contact with resident (SF).

InterRAI-LTCF tool includes several validated scales, which are evaluated based on observation of the resident. In order to assess cognitive functioning of residents we applied a Seven-point Cognitive Performance Scale (CPS) assuming that score of 0–1 refers to normal or nearly intact cognitive function, 2–3 indicates moderate cognitive impairment, while a score of 4–6 means severe impairment of cognition [17]. We also used a seven-point Activities of Daily Living Hierarchy scale (ADLh) to assess level of resident's self-reliance. We adopted the following criteria for dependency level: 0–1 as totally independent or at need of minimal supervision; 2–3 as moderately dependent; 4–6 severely dependent that means resident requires an extensive assistance of more than one person or presents total dependence [18].

In order to identify the presence of depression symptoms we used a Seven-point Depression Rating Scale (DRS), where a score equal to three or higher indicates high risk of depression [19].

2.3. Statistical analysis

In the result of in depth literature review, we selected variables, which might increase the risk of different types of UR in LTCF residents. We considered a set of factors related to physical and psychological health status, and social functioning. First, we performed analysis using Chi^2 test and *t*-test to describe residents who presented RR or RS, or SF. Then, we applied a logistic regression analysis to find risk factors for these three UR in separate models. The results were considered statistically significant if *P*-value for rejecting our hypotheses was below 0.05. We conducted analysis using IBM SPSS Statistics 23 software for Windows® (IBM SPSS Statistics, IBM Corporation, Chicago, IL).

3. Results

3.1. Study group characteristics

The study group consisted of 288 LTCF residents with female predominance (68.4%). The median age of studied residents was

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