CONCEPT ANALYSIS



Homebound: A concept analysis

Johannes Schirghuber RN, MScN D | Berta Schrems RN, MSc, MA, PhD D

Department of Nursing Science, University of Vienna, Vienna, Austria

Correspondence

742

Schirghuber Johannes, RN, MScN, Department of Nursing Science, University of Vienna, Alser Straße 23/12, AT-1080 Vienna, Austria.

Email: johannes.schirghuber@gmail.com

Abstract

Aim: Analysis of the concept and development of a conceptual definition of homebound.

Background: Homebound persons have a significantly higher mortality risk as well as physical and psychosocial burden. A clarification of the term is necessary to develop preventive measures.

Design: Concept analysis.

Data Sources: Scientific literature from electronic databases (CINAHL, Medline via PubMed, PsycINFO, PsycArticles, and Scopus) and definitions from online dictionaries.

Review Methods: Walker and Avant's method was applied to guide the concept analysis. To prevent arbitrary and empty results in determining the attributes, antecedents, and consequences a thematic analysis was carried out.

Results: Homebound is defined as an enduring condition in which the life-space is reduced to the home, but moving around in the home is possible (by walking short distances alone or by holding on to furniture, or with the help of a stick, walker, or another person). Homebound has six attributes: in need of help in ADL/IADL and in leaving the life-space, powerlessness, life-space confinement, mobility limitation, endurance, and weakness. Physiological instability and physical immobility are antecedents with wide-ranging influencing factors as illness, complexity, burden, and endogenous/exogenous booster. Homebound has also wide-ranging consequences such as the progression of inactivity, physical, psychosocial, and/or spiritual problems.

Conclusions: The multidimensional concept of homebound modifies the concepts of mobility and immobility. Given the extensive consequences of homebound nurses play a central role in the prevention.

KEYWORDS

boundedness, bound, concept analysis, homebound, housebound

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1 | BACKGROUND

There is a common experience of being bound to the home due to a temporary and sometimes ordered situation (e.g., due to the weather, a broken leg, a cold, a quarantine, and a pandemic). This experience can be similar to the feeling of boundedness of people who are permanently unable to leave their homes due to various diseases. Being homebound is a phenomenon with a high prevalence and varies from 5.6% in the overall population 14.4% among people age 65+ in a large city in Japan, 2 17.7%-19.5% of older people in Israel³ or 19.6% of new enrollees for Medicare benefits (in five states of the USA).4 It is also known that homebound persons have a significantly higher mortality risk than nonhomebound (risk ratio [RR] 1.33, 95% confidence interval [CI] = 1.08-1.63)⁵ and being homebound is associated with a 2-year mortality (hazard ratio [HR] 2.08, 95% CI = 1.63-2.65), independently of functional impairment and diseases. Homebound persons show more chronic conditions, polypharmacy, and hospitalization⁴ as well as multiple consequences (e.g., physical inactivity, undernutrition, 7,8 depressed affect, and social isolation³). Against the background of the high prevalence, the mortality risk, and the multifactorial consequences, there are primary healthcare programs for people bound to the home in which the nurses are integrated into interdisciplinary teams. Studies show that these programs have positive effects on individual, caregiver, and systems outcomes.9 It is therefore important to recognize the risk of homebound at an early stage. For preventive measures, the influencing factors must also be identified. 10 A clear definition can support future research projects, 11 for example, to develop a nursing diagnosis and preventive measures. However, there are only vague and varied definitions about homebound, and thus a concept analysis is necessary. 6,11 In addition to the term homebound, the term housebound also occurs in scientific literature and is used synonymously, although homebound is used most frequently in international publications.6

The aim of this study is to analyze the concept of homebound to develop a clear definition. The conceptualization is intended to serve nursing knowledge and nursing language as well as for nursing interventions to prevent or reduce the burden and consequences of being homebound.

2 | METHODS

The eight-step concept analysis method by Walker and Avant¹² is used. For the selection of the concept (Step one), homebound is identified and the aim of the analysis (Step two) is clarified. Step three comprises a systematic literature search of all uses of the concept of homebound. During the investigation of all these instances, the attributes which occur repeatedly are collected. This facilitates the definition of the attributes of the concept (Step four). The development of model cases and additional cases (Step

five and six) took place as an iterative process within the analysis of attributes, antecedents, and consequences. The identification of the antecedents and consequences of a concept (Step seven) are important for refining the attributes because an attribute cannot simultaneously be an antecedent and a consequence. ¹² The selection of empirical referents to identify the defining attributes of the concept of homebound is the last step (eight) by Walker and Avant's concept analysis method.

To avoid the conceptual analysis from being arbitrary and leading to empty results 13 Baldwin and Rose 14 suggest the use of thematic analysis. The thematic analysis according to Froschauer and Lueger 15 with six sequences was carried out to analyze the conceptual structure of thematic categories and their relationships. The first sequence (a) codes central statements in text passages and builds thematic categories. Using the MAXQDA 2018® Software, the defining attributes, antecedents, and consequences identified from the scientific literature and the dictionaries were coded. This first sequence of thematic analysis is similar to step four in Walker and Avant's method about identifying all possible attributes which appear over and over again. 12 The further sequences of thematic analysis are (b) analysis of the theme categories according to subcategories, (c) structuring thematic categories with the text/research question, (d) connection of the thematic categories with the subcategorieshierarchical system, (e) interpretation of the hierarchical system, and (f) comparative analysis of the texts. 15

2.1 Data sources

For the concept analysis, two approaches were used: a systematic search of publications in scientific literature and the consultation of online dictionaries (as the American Heritage Dictionary, the Cambridge dictionary, the Dictionary.com, the Merriam-Webster dictionary, and the Oxford Learner's dictionary). For the search of scientific literature focusing on the definition of homebound publications from January 1990 to December 2019 were applied. The search period of 30 years was chosen to increase the chance of receiving more publications within a definition than if just searching current literature. Different spellings (homebound, home bound, home-bound, housebound, house bound, and house-bound), which were all included in the search process, were recognized in the literature. The following databases were used: CINAHL, Medline via PubMed, PsycINFO, PsycArticles, and Scopus. The selection of the diverse databases from physical, psychological, and social disciplines was meant to reduce the bias of the understanding of the true nature of the concept. 12 For the first screening, articles were included if the search term was found in the title and/or abstract. In this way, 4046 publications were identified in the databases. These articles have been checked for English-language publications, abstract availability, duplicate publications, and full-text availability. The result was 505 publications, which were examined

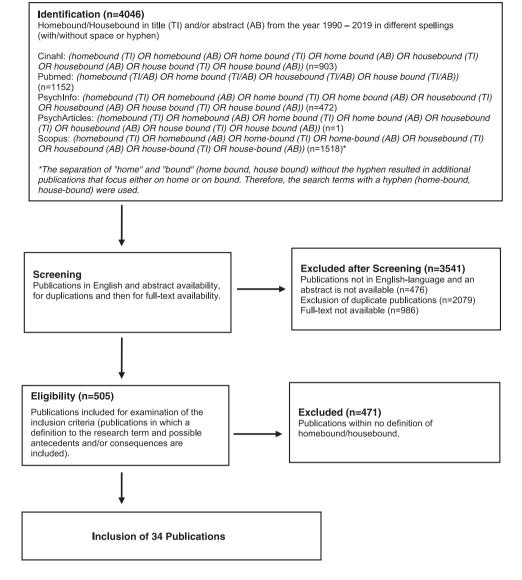


FIGURE 1 Flowchart of the study selection process

again after defining the research term and containing antecedents and/or consequences within the text. Finally, 34 publications were included (Figure 1).

3 | RESULTS

3.1 | Uses of the concept homebound in scientific literature

Homebound is defined in different ways. There are similarities but no consistency concerning the definition, antecedents, or consequences. The following definitions can be found. Homebound is defined as the situation where people cannot leave their homes independently without assistance. 8,16–19 Leaving their home is only possible under great difficulty 4,7,9,20–24 or physical effort and/or only with assistance 25,26 for example, assistive devices, by others, 8,11,24,27,28 or by special

transport. 11,24,28 Assistive devices can be walkers, canes or wheelchairs. 3,24,29 Out-of-home visits are only possible twice a month, 20 or twice a week,²⁸ or every 2/3 days or less,³⁰ or once a week or less, ^{2,3,5,10,31-38} or daily for about 5 min. ³⁶ Similarly homebound is categorized in "completely homebound" (people never or rarely leave their home), "mostly homebound" (people leave their home once a week or less), and "semi-homebound" (people leave the home with great difficulty and need the assistance of another person). 1,28,39 Persons who are homebound can manage most or all of their activities of daily living (ADL) indoors independently, 3-5,10,16,17,21,27,39 but they have a low functional status in the instrumental activities of daily living (IADL).^{2-5,16,17,21,27,31,39} They experience difficulties in walking³⁴ and/or climbing stairs⁴ but they can walk independently for about 5 m, 10,35 or move inside the house using a cane or walker or holding on to furniture.²⁷ The house is only left infrequently with great difficulty for a short time, or medical treatment,9 for example, dialysis, chemotherapy, radiation therapy, day care center to receive medical care, or to attend church service, hairdresser's visit, walk

TABLE 1 Attributes of homebound

Homebound

Need of help in leaving the life-space

Homebound people need help from other people to leave their home with aids such as crutches, cane, walker, wheelchair, or special transportation.

Need of help in ADL/IADL

Homebound people manage most or all the ADL indoors independently, but they need help to manage the IADL.

Powerlessness

Homebound people feel powerless because they are unable to change the unwanted and acquired condition (chronic diseases, frailty) which leads to homebound.

Life-space Confinement

Homebound people are confined in their life-space because they cannot leave the house without help. The life-space in the house is accessible.

Mobility Limitation

Homebound people are limited in their mobility because they can only walk short distances independently. They have difficulty walking and climbing stairs. Moving around in the house is possible with a stick or a walking aid or by holding on to furniture.

Endurance

Homebound people are permanently bounded to the house. Leaving the house is limited from twice a month to once a week or for about a few minutes a day.

Weakness

Homebound people feel weak and are therefore inclined to lie down in bed during the day.

Abbreviations: ADL, activities of daily living; IADL, instrumental activities of daily living.

around the house, participate in family celebrations, or a funeral.²⁴ Homebound persons are inclined to lie down in bed during the day.⁴

3.2 | Uses of the concept homebound in dictionary definitions

Bound (as an adjective) means a "certain or likely to happen, or to do or be something." Being bound in combination with confined or restricted to home, 41 respectively as "(causing people to be) unable to leave a place because of an unwanted condition" as illness, $^{41,43-45}$ as an injury/accident, 43,44 for example, falling, 46 or because of old age. Homebound persons can be in poor health 44 and as a result of the unwanted condition they "cannot walk very far."

3.3 | Defining attributes

The results of the attributes of homebound are six key attributes: (1) in need of help, (2) powerlessness, (3) life-space confinement,

(4) mobility limitation, (5) endurance, and (6) weakness (Table 1). All these attributes must occur to be associated with the concept of homebound.

3.4 | Model case and additional cases

The model case and the additional cases were developed in an iterative process within the thematic analysis of the attributes, antecedents, and consequences. In a doctoral colloquium for nursing science (*n* = 12), the model case and additional cases, their titles, and the attributes were validated in the first version for clarity and traceability. This resulted in an extended perspective to the concept of homebound. The model case of homebound demonstrates all defining attributes of the concept (Table 2). The development of additional cases is intended to support the selection of attributes to delimit the term homebound from similar terms. A comprehensive picture and a clear demarcation are presented (Table 2) between the concept of homebound to temporary homebound, psychosocial—homebound, unboundedness, fixation, and home-rest.

3.5 | Antecedents and consequences

3.5.1 | Antecedents of homebound

The antecedents of homebound are physiological instability and physical immobility. Physiological instability is characterized by pathological changes of physiological parameters (e.g., pulse, respiratory rate, arterial pressure, and cortisol level), dynamic state (reflected by slight variations of the physiological parameters), and maintaining a balance of physiological parameters (which vary only slightly in the occurrence of disruptive components). Physical immobility is characterized by the restriction or loss of physical functionality such as problems in balance, hand strength, physical stability, gait, as well as the inability of maintaining posture. This means that people are not able to stand on their own feet, walk upright, and move around while maintaining balance.

3.5.2 | Influencing factors of the antecedents of homebound

Based on the thematic analysis, four influencing factors to the antecedents of homebound emerged: illness, complexity, burden, and booster. *Illness* includes chronic forms of diseases (cardiovascular, cerebrovascular and other vascular diseases, respiratory, nephrotic, neurological and metabolic diseases, and cancer diseases), as well as musculoskeletal diseases (e.g., hip fractures, osteoporosis, and arthritis). 1,22,28 Illness is an essential influencing factor of physiological instability and physical immobility, which can be reinforced by the potential influencing factors as complexity, burden, and booster. *Complexity* includes co-/multimorbidity 9,22,23,25,26 and

TABLE 2 Model case and additional cases of homebound

Model case - Homebounda

Mary is a 67-year-old female and she is bounded to her life-space, because the mobility is limited outside the house. She needs help to leave her house to visit the doctor once a week and to manage her IADL. A nurse helps her to go outside in a wheelchair. Indoors, the nurse helps Mary with the daily shower. Otherwise, Mary manages her ADL indoor independently with a cane. She often spends the day sitting on the sofa or in bed. Thereby Mary has the energy to at least move active in the house. Mary says: "Getting old is not nice! I used to travel a lot. Now, I feel even too weak to go, for example, to church. I am powerless, so I cannot change this enduring condition." This model case includes all six attributes of being homebound: in need of help, powerlessness, life-space confinement, mobility limitation, endurance, and weakness.

Borderline case -Temporary Homebound^b

Josef is a 55-year-old male and he is only then bounded to his life-space when he has acquired a relapsing mobility limitation. At this time, Josef feels too weak to move independently for more than five meters. His son then takes over the IADL, but Josef can do all ADL in the house. In the relapsefree time, he goes outside the house independently with a walker or walks up the stairs to get to his bedroom without his son's help. During a relapsing period, Josef spends all the time on the ground floor. He feels powerless against his illness, which comes again and again. This borderline case includes five out of six attributes of being homebound: in need of help, powerlessness, life-space confinement, mobility limitation, and weakness. However, there is no endurance of the phenomenon of boundedness.

Related Case - Psychosocial - Homebound^c

Ann is a 67-year-old female and she is bounded to her life-space, because she is afraid of people and also of being robbed. Therefore, Ann can no longer leave the house alone. She says: "That's how it is. I cannot change it anymore." Although she suffers from chronic cardiac disease, she could go outside without any problems. She needs help to leave the life-space once a week to go to the doctor's and to manage her IADL. This related case includes four out of six attributes of being homebound: life-space confinement, powerlessness, endurance, and in need of help. Further, Ann develops a depression. She says: "Before that, I could do everything at home. But currently, with my depression, I feel weaker to do my daily activities." Now, this related case includes five of six attributes of being homebound: life-space confinement, powerlessness, endurance, in need of help, and weakness.

Contrary case - Unboundedness^d

Max is a 34-year-old male who knows what life all is about. He needs a cane but can leave the home independently. Just recently, Max was on a business trip abroad. The apartment is barrier-free, so he can walk in it without the walking stick. He can drive a car and go for a swim. Max manages all ADL and IADL independently and he feels strong enough to manage his life independently. This contrary case contains no attributes of boundedness.

Invented case - Fixation^e

Olivia is a 78-year-old female and there were shocking media reports about her. She is permanently restless because of her dementia. She lives with her husband in a house and they have no contact with relatives and neighbors. Everyday Olivia's husband fixes her with a string, so that she can only move about two meters in the room between the bed and chair. Olivia is already very neglected and dirty, because her husband is unable to cope with the whole situation. She urgently needs help in her ADL and IADL. Due to the immobilization, she is getting weaker. Olivia feels powerless, because of this immutable condition. This invented case includes all six attributes of being homebound: life-space confinement, mobility limitation, endurance, weakness, powerlessness, and in need of help.

Illegitimate case - Home-Restf

William is a 25-year-old male, he is at home in quarantine due to infectious disease and is temporarily not allowed to leave his house for three weeks. So, his life-space is confined, and he needs help to perform his IADL outdoor and an escort to leave the house for investigations by a doctor. He feels powerless now, because of this unwanted and acquired condition. William says: "I know this home-rest. When I was hospitalized about an illness, I could only get up from bed to go to the toilet, to eat, and to take a shower. This made me weaker and weaker." This illegitimate case includes four out of six attributes of being homebound: life-space confinement, powerlessness, in need of help, and weakness.

Note: The model case was created based on the included and analyzed literature, where homebound is mostly described with physical antecedents (e.g., chronic diseases). Physical antecedents can appear enduringly (model case) or temporarily (borderline case). Psychosocial homebound as a variant of homebound is usually described in the literature with physical antecedents. The model and the borderline case as well as the related cases have endogenous causes (physical or psychosocial). In contrast to this, the invented and illegitimate cases of homebound have exogenous causes with or without the consent of the person concerned. Each case contains a fictional first name, female and male adult, and different ages balanced. The respective attributes of homebound, which are included in the cases, are highlighted in italics. To create a clear demarcation to the model case, the additional cases were given titles.

Abbreviations: ADL, activities of daily living; IADL, instrumental activities of daily living.

^aAll defining attributes must occur to be associated with the concept of homebound.

^bThe borderline case is an example of only temporary homebound, which means that people feel bounded only for a certain time.

^cThe related case refers to psychosocial antecedents of homebound people, even if they show no signs of mobility limitation. Feeling weakness is obligate, e.g., by depression.

^dThe contrary case emphasizes the phenomenon of unboundedness, missing all attributes of boundedness.

^eThe invented case is titled Fixation. The situation described must be a horror for those affected, and for laypeople in the healthcare sector this must sound like science fiction. Since the antecedents are based on an arranged situation, the attributes of homebound only develop with continued fixation. ^fThe illegitimate case is an example of home-rest. Home-rest is not acquired and not permanent. It is indeed an arranged immobilization into the house, but it is also mostly based on consent. Home-rest is not always associated with weakness, but it may persist or develop depending on its duration.

TABLE 3 Endogenous and exogenous booster as influencing factors of the antecedents of homebound

Endogenous booster	Exogenous booster
Low education, 4,10 knowledge deficit 18	Hospitalization ^{1,9,28}
Problems in self-management in chronic diseases ¹⁸	Difficult social situation, ³ living alone, ⁵ and unmarried status ^{3,5}
Nonadherence of treatment plans and drug regime ⁴	Lack of social support ^{10,31}
Female, ^{1,4} age, ^{1,4,5,10}	Lack of participation in community or social activities 10
Hearing impairment, $^{3,10,39}_{}$ vision impairment, $^{3,24,39}_{}$ and balance impairment $^{39}_{}$	Lack of networking with friends, relatives, and neighbors $^{\!10}$
Urinary incontinence, 33 fear of falling 34	Difficult financial situation, 3,26 lack of transport availability 35
Depression, ^{1,4,10,26} depressive mood, ³⁰ and low coping strategy ¹⁹	Geographical location for transport systems (e.g., living in a rural area) 2,31
Low cognitive functioning, 35 cognitive impairment, 1,20,24 dementia, 1,20 alcoholism, and anxiety disorders 20	Limited specialized services, e.g., physical therapy, nursing service (e.g., in a rural area) 31
Consequences of poor dental health, such as health problems, $^{\rm 38}$ malnutrition, or the burden of illness $^{\rm 11}$	Lack of regular access to a dental, ^{11,38} optical, nutrition, pharmacy, and psychological healthcare services ¹¹
Consequences of bereavement (of a partner/child), such as problems in physical/mental health, depression symptoms, and financial burden ²⁶	Non-barrier-free environment ²⁸

polypharmacy. ^{4,29,30} Illness and complexity can affect people at any age but complexity in old age is also characterized by the phenomena of frailty ^{9,25,29,35,36} and sarcopenia. ³²Burden includes the burden of illness and/or symptoms ^{21,23,28} (e.g., pain, ²⁵ fatigue, ^{21,23} nausea, shortness of breath, and depression ²¹) and suffering. ²⁰ Booster characterizes a variety of endogenous and exogenous influencing factors which can intensify both illness, complexity and the burden (Table 3).

3.5.3 | Consequences of homebound

Based on the literature five main consequences of homebound were identified—physical inactivity, physical, psychological, social, and spiritual consequences. *Physical inactivity* influences further outdoor activities, the used life-space, ³² and the progression of the ADL/IADL status.⁵ *Physical consequences* include progressing physical disability and a rising risk of becoming bedridden (=bedbound⁶), ^{10,33} poor nutrition, ^{7,8} or risk of falling. ^{27,39} *Psychological consequences* include depression, ^{4,17,19,37} anxiety, ^{4,17} cognitive impairment, ⁴ dementia, ¹⁰ or intensifies their psychological stress. ¹⁰ *Social consequences* contain loneliness, ³ dependency, loss of social relationships, ³⁶ or social isolation. ^{2,37} *Spiritual consequences* are particularly influential for those who can no longer attend religious services, or lack contact with clergy. ¹⁶

3.6 | Empirical referents

Empirical referents are important for the development of assessment instruments and essential to recognize or measure the defining attributes. ¹² Some instruments focus on the attributes of homebound, for example, to measure the mobility limitation as the de Morton

Mobility Index (DEMMI). This index includes the definition of mobility of the World Health Organization (WHO) as "moving by changing body position or location or by transferring from one place to another, by carrying moving or manipulating objects, by walking, running or climbing, and by using various forms of transportation."50 The Life-Space Assessment Questionnaire (LSA)⁵¹ "assesses mobility from the spaces that older adults walk, and how often and how independently they move."52 The life-space levels are the bedroom, the home, outside the house, the neighborhood, the town, and unlimited.⁵¹ Tools to assess activities of daily living (Katz Index of ADL's or Barthel-Index)⁵³ and the Lawton instrumental activities of daily living scale (IADL-Scale)⁵⁴ are instruments to measure the attribute in need of help into ADL and IADL. To measure powerlessness as an attribute of homebound, the Powerlessness Assessment Tool⁵⁵ could be used. For the measurement of weakness, it is possible to carry out force and endurance measurements as part of a clinical assessment. Endurance is measured by the attribute itself.

4 | CONCEPTUAL DEFINITION OF HOMEBOUND

Homebound is defined as an enduring condition in which the life-space is reduced to the home, but moving around in the home is possible (by walking short distances alone or by holding on to furniture, or with the help of a stick, walker, or another person). Homebound has six attributes: in need of help in ADL/IADL and in leaving the life-space, powerlessness, life-space confinement, mobility limitation, endurance, and weakness. Physiological instability and physical immobility are antecedents with wide-ranging influencing factors as illness, complexity, burden and endogenous/exogenous booster. Homebound has also wide-ranging consequences such as

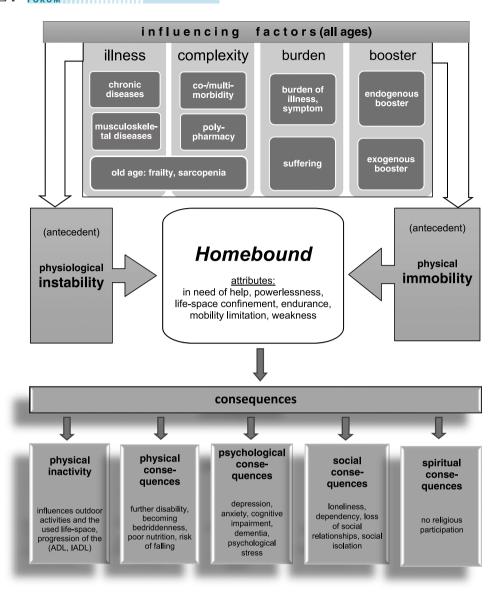


FIGURE 2 Theoretical model of homebound (adapted from Schirghuber and Schrems⁶)

the progression of inactivity, physical, psychosocial, and/or spiritual problems (Figure 2).

5 | DISCUSSION

A clear concept of homebound is fundamental for appropriate nursing interventions for the prevention of the consequences. Preventive interventions have to start before becoming homebound. Examples for nursing-led interventions are homebound-related health education events in the community, introducing elderly people, families, and community health professionals to the concept of homebound and its consequences, and guiding the elderly to maintain good living habits. Preventive measures are also regular activities to walk out of the house and interact with other people and do exercises and activities. Likewise, the focus of measures must be

placed on the prevention of influencing factors to prevent homebound or to reduce the progression of homebound. 10 These preventive measures are carried out by nursing and other health professionals. Few studies show that home-based primary care programs focusing on homebound people within interdisciplinary measures (by a medical doctor, nurses, physical assistant, social worker, occupational therapist, and physiotherapist) positively affect individual, caregiver, and system's outcomes. In these programs nurses are often the primary care provider, conduct comprehensive geriatric assessments, carry out routine evaluations and duties, participate in interprofessional care meetings, and plan or update patient care plans. Developing the role of nurses in the prevention of homebound, there are six domains of interest: management of patient health/illness in ambulatory care settings, monitoring and ensuring the quality of healthcare practices, organizational and work-role competencies, helping role of the nurse, teaching-coaching function of the nurse, and effective management of rapidly changing situations 56

Being homebound is a complex clinical condition requiring nursing assessment instruments. Some empirical referents to measure the attributes of homebound could be identified. Instruments are available for measuring physical mobility (e.g., DEMMI). But to provide the most appropriate intervention a systematic review of evidence-based assessment tools is needed. Therefore, a clear concept of homebound is fundamental.⁵⁷

Homebound has endogenous (physical and psychosocial) and exogenous (ordered) antecedents. In the literature, homebound is closely related to physical aspects. This is consistent with nursing practice in which mobility is often reduced to physical components. However, from the consequences of homebound, it can be clearly seen that besides physical components, moving independently also has emotional and psychosocial effects. Psychological and social reasons for being homebound are shown by differentiating the cases. Therefore, the concept of mobility, focused on physical abilities should be extended. The narrowness of the concept should be a topic in the further development of the concept. Thus, studies are required to examine the application of the attributes of homebound not only in different kinds of homes (e.g., nursing homes) but also regarding the psychological and social causes of being homebound.

Such an extended version of homebound could be the basis for a problem-focused, as well as a risk nursing, or a syndrome nursing diagnosis. Evidence-based nursing diagnosis includes a concept analysis and a content validity study of the attributes, the antecedents and consequences, supported by clinically validation and testing.⁵⁸

The literature also shows that homebound very often represents the preliminary stage for bedriddenness. For homebound people, maintaining the quality of life is equally important as preventing them from becoming bedridden. The process of becoming bedridden is insidious and has besides negative consequences (e.g., pathology of immobility, restriction of interests, and loss of time) an increasing need for support. Being bedridden is perceived as a loss of power and control within one's own four walls and experienced as a final state or (social) death. Preventing homebound is necessary to avoid admission to a nursing home and to reduce the burden on family and society, the latter concerning the costs of social security systems.

6 | LIMITATIONS

This concept analysis includes publications within definitions of home-bound, but there are missing data about further publications that may provide additional information on antecedents and their influencing factors and consequences of homebound. Homebound can also mean being bound to a wheelchair or a bed. In this concept analysis, the relation of being wheelchair-bound or bedbound to homebound could not be clarified. Further concept analyzes are necessary for this. The results of this concept analysis show that psychological problems (e.g., anxiety, depression, and dementia) are possible influencing factors of the

antecedents. At the same time, psychological problems are a related case (e.g., anxiety and depression) as well as possible psychological consequences of homebound. In this context, the requirement by Walker and Avant, ¹² the exact assignment to either the attributes, the antecedents or the consequences of a concept, could not be fulfilled.

7 | CONCLUSION

Homebound is a very comprehensive phenomenon due to the physical, psychosocial, and/or spiritual consequences. It can affect any person regardless of age. The understanding of the concept of homebound is necessary to avoid possible consequences and to develop preventive measures. For this purpose, the proof of the content validity of the concept of homebound and the development of a nursing diagnosis as further steps are needed. Hence, to prevent homebound and its consequences nurses could take on a central role in health care and in an interdisciplinary context to coordinate and perform preventive measures against homebound.

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CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

AUTHOR CONTRIBUTIONS

Conception and design of the study, analysis and interpretation of data: Schirghuber Johannes and Schrems Berta. Drafting the article or revising it critically for important intellectual content: Schirghuber Johannes and Schrems Berta. Final approval of the version to be published: Schirghuber Johannes and Schrems Berta.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

ORCIE

Johannes Schirghuber https://orcid.org/0000-0002-8645-3806

Berta Schrems https://orcid.org/0000-0002-2036-7091

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