


The quality of life of older people aging in place: a literature review

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Abstract

Purpose In order to cope with the challenges that are the result of an aging population, policies and services promote keeping elders in the community and letting them age in place rather than sending them to specialized institutions. Aging in place refers to the option where people can stay in their homes as they age. This policy option, however, poses various challenges and may also threaten the quality of life of the aging. A literature review was performed on the quality of life of older people aging in place to determine whether the actual assessment of quality of life can be used within aging in place.

Methods Web of Science, PubMed, CINAHL, Sociological Abstracts and Social Science Research Network were searched for publications on “Ag(e)ing in place” AND “Quality of life.”

Results Although assessment is crucial to a policy pursuing a good quality of life, literature reveals that it is seldom performed. Only a small part of the studies report on the

assessment of quality of life, including the instruments used and the results. The findings also indicate that there is no consensus on the definition of quality of life or its domains structures.

Conclusion As no existing instrument assessing the quality of life of older people aging in place could be identified, such a tool should be developed, because any policy towards this growing group of people should be complemented by an evaluation.

Keywords Quality of life · Aging in place · Older people · Assessment

Introduction

Due to better living conditions and improvements in medicine and technology, life expectancy has increased globally during the last decades. Current demographic projections forecast that the proportion of elderly people will continue to grow, and that the segment of very old people will grow even faster. For instance in Europe, the segment of people aged 80 years or more will double by 2080, compared to 2014 [1, 2]. To cope with the challenges arising from this aging population, policies and services are increasingly focusing on living in the community rather than relying on institutions as the primary axis of care [3]. Ilinca & colleagues state that this process of deinstitutionalizing care increases the sustainability of care systems and enhances the users’ quality of life [4].

Moreover, research has shown that older people in western countries prefer to live in their own familiar environment as long as possible [5–8]. The policy objective where one has the ability to remain in the current setting as one ages is described as ‘aging in place’ by Cutchin [9].

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The fact that older people are able to age in the residence of their choice seems to have an impact on their quality of life. Older people indicated home & neighborhood as one of the constituents of the ‘good things’ that gave quality to their life [10]. The relation between ‘Quality of Life’ and ‘Aging in Place’ will be further clarified in following sections.

Aging in place

Due to changing demographics and changing policies, the concept ‘aging in place’ has received increased attention of late. Aging in place used to refer to individuals growing old in their own homes, but lately the idea has broadened to remaining in the current community and living in the residence of one’s choice. Indeed, compared to Cutchin’s earlier definition, the World Health Organization Centre for Health Development [5, p. 9] defines the concept broader as: “Meeting the desire and ability of people, through the provision of appropriate services and assistance, to remain living relatively independently in the community in his or her current home or an appropriate level of housing. Aging in place is designed to prevent or delay more traumatic moves to a dependent facility, such as a nursing home”.

This definition draws attention to some important aspects such as the acknowledgement that older persons prefer not to move and that services and assistance should be made available to guarantee some degree of independence. As was stressed by Cutchin [9], independency, a certain degree of competence and control over one’s environment, is fundamental to aging in place and thus needs to be encouraged. In this regard, Ball and colleagues [11] mention that the concept has been expanded and now includes assisted living facilities, a type of supportive senior housing.

Besides older people’s preferences, aging in place is often considered less expensive than residential care [12], and is often seen as a cost-effective solution for an aging population [13]. Furthermore, an individual’s quality of life seems to benefit from this aging in place, because one’s autonomy is preserved [14] as are one’s social connections [15]. Indeed, apart from playing an important role in older people’s quality of life ‘Home’ is the place where people spend a great deal of their life. As a consequence, this place binds them through intimate relations and relations with friends and relatives [16].

Although several authors highlight the benefits of aging in place, there are potential negative side effects. First, the delayed access to necessary services and accommodations can be a downside which can cause excessive burden to informal caregivers [15]. Furthermore, one’s home can become one’s prison because of the immense weight of the chores that need to be done. Indeed, for older people with

decreased functional capacities, managing home and the home environment can simply be too much. Third, negative side effects of aging in place can also cause a decrease in older people’s quality of life. A policy and practice that is only supporting basic needs of older people is jeopardizing this. External factors such as weak informal support, a physically unfit house and neighborhood, a poor social network and an insufficient health- and social-care, can threaten a life of quality. One’s home should not be a place of frustrations and intense negative emotions and experiences such as loneliness [13] but a place where people can age and experience a life of quality.

Quality of life

‘Quality of Life’ has become an important concept in medical, social, and psychological research. Moreover, according to Bowling and Gabriel [17], it should also be an important endpoint in the evaluation of public policy. However, ‘Quality of Life’ is often used as an umbrella-concept, and when applied in healthcare, it refers mainly to the physical component, occasionally extended with a psychological component. Although the concept is commonly used, it is often not clearly defined or understood [18], nor is there a consensus definition [19]. Some scholars find it difficult to define as it is influenced by both objective and subjective aspects [20]. Nevertheless, there is a consensus about several aspects including: (a) quality of life is multidimensional [15, 21, 22]; (b) quality of life is dynamic and can vary between individuals and within individuals during their lifetime [23, 24]; (c) quality of life consists of both objective and subjective components [15, 21, 24]. By adopting a multifaceted, holistic approach and stressing subjective perceptions, values and cultural contexts, the Quality of Life Group of the World Health Organization defines quality of life as: “individual’s perception of his or her position in life in the context of the culture and value system where they live, and in relation to their goals, expectations, standards and concerns” [25, p. 3].

Studies in the fields of ‘Aging in Place’ and ‘Quality of Life’ have greatly multiplied recent years. However, up till now, lesser attention has been paid to the assessment of the quality of life of older people aging in place. Because quality of life is significant in the ‘Aging in Place’ concept and aging in place is, in turn, an important element contributing to the ‘Quality of Life’ of older people, quality of life and aging in place are inextricably linked. This article presents a state of the art in literature on the operationalization and assessment of quality of life within older people aging in place, and attempts to formulate an answer to the following research questions: (1) ‘How is quality of life operationalized for older people aging in place?’ (2) ‘How is quality of life assessed for older people aging in place?’

and (3) ‘How is this assessment used for people aging in place?’

Method

In order to formulate an answer to the research questions: how quality of life is operationalized, how it is assessed and how this assessment is used for older people aging in place, the first author performed a literature search. A variety of scientific databases such as: Web of Science, PubMed, CINAHL, Sociological Abstracts and Social Science Research Network were consulted. The exact phrases, ‘Ag(e)ing in place’ AND ‘Quality of life’ were used in each database and ‘topic’ was selected as field code. The literature search started in October 2014 and ended in June 2015, resulting in 128 unique hits.

Inclusion criteria for this research were as follows: publications with an available full text, the sample population was sixty years and older, the sample population was living at home. The selected articles were screened for their suitability for the purpose of this review. Reasons for exclusion were unavailability of full text, the studied population was less than sixty years old, was hospitalized or received palliative care, was living in long-term care institutions or consisted of people with special conditions such as nocturia, multiple sclerosis, intellectual disabilities or dementia.

This screening for relevance resulted in 75 articles. This selection procedure is presented in Fig. 1.

Next, the articles that met the inclusion criteria were considered as the core file for this literature review and analyzed in several steps.

Step 1 in order to formulate an answer to research question # 1 “How quality of life is operationalized for older people aging in place?” the articles were searched for a clear definition of ‘quality of life,’ because, as previously mentioned, articles on this topic often lack such a clear definition. Since ‘quality of life’ is often used as an

umbrella-concept, we were particularly interested in the broader definition of quality of life in comparison with one-dimensional definitions such as health-related and social-care-related quality of life. The first research question was operationalized by indicating/scoring whether the multidimensionality of ‘quality of life’ was mentioned in the respective article.

Step 2 in order to formulate an answer to research question # 2 “How quality of life is assessed for older people aging in place?” we explored the selected articles for studies that assessed the quality of life of older people aging in place and the instruments they used. The second research question was operationalized by listing the assessments of quality of life and the used instruments.

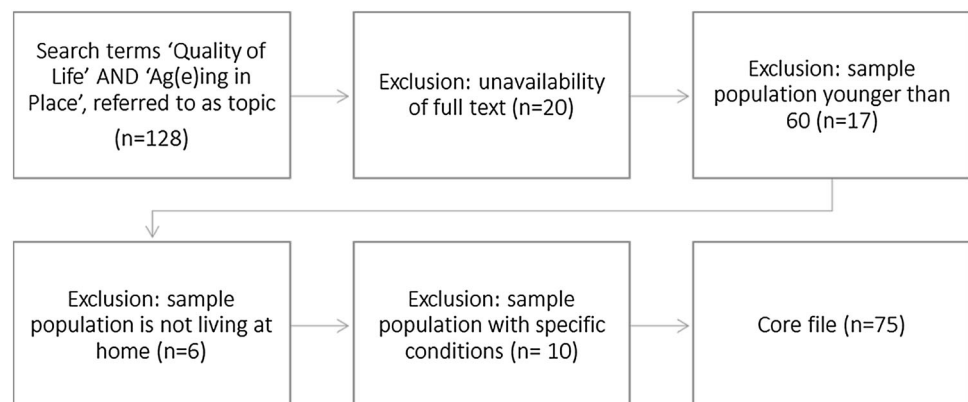
Step 3 in order to formulate an answer to research question # 3 “How is this assessment used for older people aging in place?” we analyzed the way quality of life was assessed, and verified whether the authors used the opinion of older people or not. Taking into account that the focus in the assessment of quality of life should lie on the subjective experiences of individuals, implying that, in this context, the older person is the only one able to judge his or her quality of life. Or, as stated by Farquhar [26, p. 3]: “Who else than the individual himself/herself is in a position to express his/her own experiences?” Nevertheless, the use of proxies in assessing health-related quality of life is frequently reported [27–30]. We operationalized this third step by determining whether the respondents were older people or their proxies.

Next to this, we explored whether this assessment resulted in a score.

Results

Based on the research design, the articles that met the inclusion criteria were divided into descriptive and empirical articles. Regarding descriptive articles ($n = 22$), it was found that they were mostly opinion articles ($n = 17$). Only five articles were reviews.

Fig. 1 Selection procedure



As regards the empirical articles, it was found that the publications came from different research areas, such as health care, social care, community care, and so forth.

Figure 2 provides an overview of the included articles.

Data extraction

Step 1: Definition and multidimensionality of the concept “Quality of Life”

In a first step, we explored if the authors used or formulated a definition of quality of life. As shown in Table 1, six articles of 75 (or 8%) contained a definition of the concept. In each article, the authors used an existing definition. Table 1 also shows that all authors used different definitions. Some were more general; others contained specific domains like health, social support, spirituality, and financial stability. Some authors started by giving a general description of the concept and also mentioned several domains.

We noticed that some authors, apart from an offered definition, stated the multidimensionality of quality of life explicitly without however, listing them. Others indicated this property by listing the involved domains. We found that only four articles of 75 (or 5,3%) stated explicitly the multidimensionality and four other articles of 75 (or 5,3%) contained relevant domains. One article contained the indication of the multidimensionality of quality of life and some domains. We noticed that in each enumeration, the social aspect was mentioned as a domain of quality of life, whereas health and environment were cited three times, psychological state two times and other domains are cited only once. The definitions used and the listed domains are also presented in Table 1.

Step 2: Assessment of quality of life and used instruments

Our second analysis concerned the assessment of quality of life and the instruments employed. Twelve of the 75 articles (or 16%) contained an assessment. An overview of the instruments used is found in Table 1.

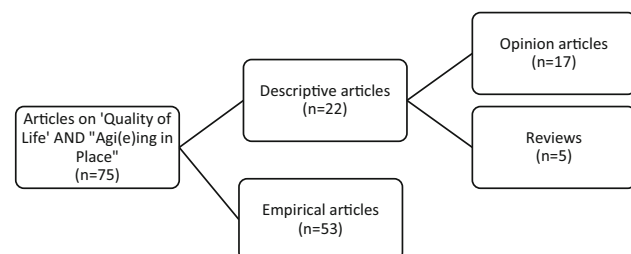


Fig. 2 Overview of the included articles

Table 1 shows that four articles reported on the assessment of health-related quality of life, and one article reported on the assessment of social-care-related quality of life, while the rest reported on the assessment of overall quality of life.

The EUROQoL and the SF-36, instruments to assess the health-related quality of life, were used two times each, whereas the Adult Social Care Outcomes Toolkit or ASCOT was used one time to assess the social-care quality of life. Instruments to assess the overall quality of life were each used one time: WHOQOL-BREF and Eurohis-QOL, while the four other authors used self-developed quality of life questions and one author assessed the quality of life by using the VAS or Visual Analogue Scale.

Step 3: Used respondents

The third step assessed the respondents. We examined whether the authors based their conclusions concerning the quality of life on self-reports or on proxies. Table 1 shows that in the articles where an assessment was reported, only older people who were living at home were questioned about their quality of life.

In addition, we explored whether the assessment of quality of life resulted in a score. Eleven assessments resulted in a score; the results for the twelfth assessment lacked because the study was ongoing.

Table 1 presents the results of the combined analyzes. We noticed two kinds of articles: with and without an assessment of quality of life. The authors of the four articles without an assessment gave a definition of quality of life and mentioned the multidimensionality or gave an enumeration of some domains of quality of life.

The articles with an assessment can be divided in three groups. The authors of seven articles of the first group assessed quality of life without providing a definition, domains, or mentioning multidimensionality. The authors of three articles of the second group also assessed quality of life and mentioned the multidimensionality and/or enumerated domains of the concept. The authors of two articles of the third group assessed quality of life and provided a definition of quality of life where the multidimensionality became clear by enumeration of domains.

Discussion

The goal of this article was to review the literature on quality of life of older people aging in place in order to determine whether the assessment of quality of life can be used within aging in place. For this review, the concepts ‘Quality of Life’ and ‘Ag(e)ing in Place’ were combined. A number of results emerged from the literature review. First,

Table 1 Overview of the results

Author (year)	Definition of QOL	Apart from a given definition:/ indication of multidimensionality/domains of quality of life/none	1. Quality of life (QOL) 2. Used assessment instrument	Respondents: self-reports/proxies
Perez et al. [16]	“Qualities of life are those specific areas that a person perceives as vital in the ability to enjoy and take part in life, and feel that the commitment to participate has a meaning” [31]	Indication of multidimensionality	1. None 2. None	None
Paul et al. [32]	None	None	1. Overall QOL 2. QOL question	Self-reports
Classen et al. [33]	“Quality of life in the older adult is associated with absence of pain, good overall perceived health, financial stability, continence, availability of adequate nutritional resources, ability to perform physical activity, and functional independence” [34–36]	None	1. Overall QOL 2. QOL questions developed by Rehabilitation Engineering Research Center on Aging Center for Assistive Technology (2000)	Self-reports
Horner and Boldy [15]	“Quality of life is defined as “the ability to enjoy life and feel that it has meaning” [37]	Indication of multidimensionality	1. None 2. None	None
van Bilsen et al. [3]	None	None	1. Overall QOL 2. QOL by VAS	Self-reports
Molzahn et al. [38]	“The individual’s perceptions of their position in life in the context of the culture and value system in which they live, and in relationship to their goals, expectations and standards” [25]	Domains specific for older people: health, functional status, social support and environment	1. None 2. None	None
Prieto-Flores et al. [39]	None	Indication of multidimensionality Domains: social relationships, the residential environment, physical wellbeing	1. Overall QOL 2. QOL question (qualitative research)	Self-reports
Szanton et al. [40]	None	None	1. Health-Related QOL 2. EUROQoL	Self-reports
Fenge et al. [41]	“Quality of life is defined as those factors that make people happy or satisfied with their current life situation, past life experiences, and hopefulness for satisfaction with future life circumstances” [42]	Domains: social well-being, sense of belonging, participation in social activities and membership of family or friendship networks, mental and psychological well-being, mental and emotional health, self-esteem and life acceptance	1. None 2. None	None
Markle-Reid et al. [43]	None	None	1. Health-Related QOL 2. SF-36 (Medical Outcomes Research 36-item Short Form Health Survey)	Self-reports
Ratcliffe et al. [44]	“Definitions of quality of life vary widely and at its broadest, quality of life may include many life domains including spirituality, health, activity levels, social support, resources, satisfaction with personal accomplishments and life situations” [45]	None	1. Overall QOL 2. ICECAP-O (Index of capability for older people)	Self-reports

Table 1 continued

Author (year)	Definition of QOL	Apart from a given definition:/ indication of multidimensionality/domains of quality of life/none	1. Quality of life (QOL) 2. Used assessment instrument	Respondents: self-reports/proxies
Sheffield et al. [46]	None	None	1. Health-Related QOL 2. EUROQoL	Self-reports
Doyle et al. [47]	None	None	1. Health-Related QOL 2. SF-36 (Medical Outcomes Research 36-item Short Form Health Survey)	Self-reports
van Leeuwen et al. [48]	None	Indication of multidimensionality	1. Social Care-Related QOL 2. ASCOT	Self-reports
Deshmukh et al. [49]	None	None	1. Overall QOL 2. WHO-QOL-BREF (World Health Organization Quality of Life- short form)	Self-reports
McKee et al. [50]	None	Domains: Physical health, psychological well-being, social relationships and the physical environment. Especially for older people: health, independence and mobility	1. Overall QOL 2. QOL question	Self-reports

only a few publications contained a clear definition of quality of life. Moreover, as all definitions used in the selected articles were different, this indicates that there is no consensus. A possible explanation for the absence of a generally accepted definition is that the concept is understood in a different way depending on the area of research. Indeed, as this review contained publications from different research areas, this possibly explains why researchers used the definition that best suited their study domain. This finding of the absence of a clear definition on the one hand, and the absence of a consensus on the definition on the other hand, confirms earlier findings of Mandzuk and McMillan [18] and of Moons et al. [19].

Second, there is support in the literature for the view that there is no consensus on the domains of the concept as suggested by Horner and Boldy [15] and Hambleton et al. [22]. Notably is that only few publications referred to the multidimensionality of quality of life while others elaborated on the domains. In the publications in which the domains occurred, the social domain was always mentioned and health or physical well-being as an aspect of health and the environment both were cited second most. This may suggest that these domains have a great impact on an individual's quality of life.

Third, although the findings are consistent with other studies that emphasizes the importance of social and health-related quality of life domains, other domains are

also increasingly becoming both relevant and important as people living in place emphasize the desire for autonomy, interpersonal relations, rights, and emotional, physical, and material well-being [17, 26, 51, 52]. When asking older people about the aspects that gave quality to their life, they reported the following domains: social relationships, social roles and activities, health, psychological well-being, home and neighborhood, financial circumstances, and independence [10].

Given older people express the importance of home and neighborhood or environment on one hand and autonomy on the other hand as important aspects of their quality of life it is crucial that these aspects are included in any quality of life instrument or measurement specifically for older people aging in place. Quality of life instruments for older people must be developed bottom up, with respect of the values and standards of the individuals of the population of our focus. The literature study shows that existing scales overemphasize the importance of health or rarely consider the multidimensionality of quality of life and crucial domains for people aging in place, such as environment and autonomy, hardly ever are questioned.

These three general results underscore the value of a holistic and integrative approach to quality of life. Such an approach can be found in the theoretical model of 'quality of life' by Schalock [53, 54]. This person-centered model consists of the domains emotional well-being, interpersonal

well-being, material well-being, personal development, physical well-being, self-determination, social inclusion and rights. Earlier research in different groups has proven that these domains are universally and cross-culturally valid. Or in other words, that they are important for any individual, independent of cultural influences [55].

Conclusion

In our opinion, assessment of quality of life is important to know the needs of older people. It is also important to determine if a goal is reached and next to this, it provides information on the effectiveness, benefits and harms of interventions. We saw that, although all selected publications fitted in the ‘quality of life’ framework, only a small part of them enclosed an assessment of quality of life, with a mention of the used instrument and a quality of life score, of which two of them contained a clear definition in which domains were listed. Some researchers mentioned interventions suggesting that they enhance the quality of life but they omitted to deliver proof for such a statement.

Furthermore, we found that there was no consensus on the used instrument. Some instruments focused mainly on health and physical abilities while other questioned several domains. There was no instrument containing all relevant domains, which suggests that the measurement of quality of life depends largely upon expertise rather than opinions of the involved older people, a finding that is in line with the conclusions of Bowling and colleagues [10].

All authors that made an assessment, used older people as qualified respondents and excluded proxies. This may indicate that these researchers believed that the older person is the only one capable of judging his or her quality of life and were hence convinced that it was important to consider the perception of the individual, which was already stressed by the WHOQOL Group [25].

This literature review did not provide us with an instrument that is adapted for people that are aging in place because the aspects mentioned by these older people that express their quality of their life, are lacking. Considering the importance of home, neighborhood, and autonomy in the context of aging in place [10], it is necessary to integrate these aspects in the assessment instrument.

From this literature review, one can however derive that aging in place, in the current setting, calls for an instrument that is specifically developed to measure quality of life in this particular situation.

Further research is required to identify the relevant quality of life domains for older people aging in place, in order to develop and validate an assessment instrument, tailored to the situation of older people aging in place.

Subsequently, this instrument should be used to measure the quality of life of older people aging in place.

Governments promote aging in place for their rapidly aging population since this policy is a win–win situation for both sides. On one hand, it is seen as cost-effective, and on the other hand, it is the wish of the older generation to stay in the current setting as they grow older. Although older people report that this adds quality to their lives, it can also threaten and even diminish their quality of life due to changes in their life circumstances such as thinning of their circle of friends and relatives and deteriorating health and mobility. Governments that promote this policy have the responsibility to monitor the quality of life of these older people, and the only way to do so is to assess it. The results of the assessment will make clear if this policy impacts positively or if there is a need to intervene. When feedback indicates that standards have not been met, interventions on micro-, macro-, or meso level have to insure a good quality of life. Subsequently, the effectiveness of the intervention should be evaluated by an assessment of the current quality of life.

A top–bottom approach, based on specialist or third party perceptions, is likely to lead to a policy that is estranged from the people. As quality of life has become an important endpoint in the evaluation of public policy [56], scholars and governments can work together in developing a bottom-up quality of life instrument and assessing aging in place so that a good quality of life can be insured for people who chose this possibility.

Some limitations to this study should be taken into account.

It is possible that some literature was missed by various factors such as the set time frame, database selection, database limitation, and search term restriction.

Although the concept of ag(e)ing in place is connected to topics ranging from housing and environment to health and technology [57], it was decided not to deviate from Cutchin’s [9] definition and only use the search term “ag(e)ing in place.” This decision may have led to missed literature but ensured this study remained focused.

Next to this the first author also used only literature that was made available by her institution or by contacting the authors while snowball sampling was not used to obtain additional literature.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval This article does not contain any studies with human participants performed by any of the authors.

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