



# Unmet care needs of older people: A scoping review

Nursing Ethics

1–30

© The Author(s) 2020



Article reuse guidelines:  
sagepub.com/journals-permissions  
10.1177/0969733020948112  
journals.sagepub.com/home/nej

**Dominika Kalánková**

Comenius University in Bratislava, Slovakia

**Minna Stolt** 

University of Turku, Finland

**P Anne Scott** 

National University of Ireland Galway, Ireland

**Evriliki Papastavrou**

Cyprus University of Technology, Cyprus

**Riitta Suhonen** 

University of Turku, Finland; Turku University Hospital, Finland; City of Turku Welfare Division, Finland

**On behalf of the RANCARE COST Action CA15208**

## Abstract

The aim was to synthesize the findings of empirical research about the unmet nursing care needs of older people, mainly from their point of view, from all settings, focusing on (1) methodological approaches, (2) relevant concepts and terminology and (3) type, nature and ethical issues raised in the investigations. A scoping review after Arksey and O'Malley. Two electronic databases, MEDLINE/PubMed and CINAHL (from earliest to December 2019) were used. Systematic search protocol was developed using several terms for unmet care needs and missed care. Using a three-step retrieval process, peer-reviewed, empirical studies concerning the unmet care needs of older people in care settings, published in English were included. An inductive content analysis was used to analyse the results of the included studies ( $n = 53$ ). The most frequently used investigation method was the questionnaire survey seeking the opinions of older people, informal caregivers or healthcare professionals. The unmet care needs identified using the World Health Organization classification were categorized as physical, psychosocial and spiritual, and mostly described individuals' experiences, though some discussed unmet care needs at an organizational level. The ethical issues raised related to the clinical prioritization of tasks associated with failing to carry out nursing care activities needed. The unmet care needs highlighted in this review are related to poor patient outcomes. The needs of institutionalized older patients remain under-diagnosed and thus, untreated. Negative care outcomes generate a range of serious practical issues for older people in care institutions, which, in turn, raises ethical issues that need to be addressed. Unmet care needs may lead to marginalization, discrimination and inequality in care and service delivery. Further studies are required about patients' expectations when they are admitted to hospital settings, or training of nurses in terms of understanding the complex needs of older persons.

**Corresponding author:** Riitta Suhonen, Department of Nursing Science, University of Turku, Turku 20014, Finland.

Email: riisuh@utu.fi

## Keywords

Missed care, nursing, older people, rationing, scoping review, unfinished care, unmet care needs

## Introduction

The increase in the older people population in many countries has led to a growing demand for healthcare services.<sup>1</sup> These demands from older people are varied depending on their comorbid conditions and functional ability. Policy makers and other stakeholders are beginning to recognize and anticipate these trends which require healthcare systems to function as effectively and efficiently as possible, serving all older citizens equally with appropriate and affordable care.<sup>2,3</sup>

If a nursing care need has been adequately addressed that care need has been met. A care need met in the context of mental healthcare is

A physical, psychological, social or environment-related demand for help, care or a service, with the goal of solving or reducing a problem that is experienced or expressed by an older person in relation to an underlying psychiatric condition.<sup>4</sup>

This definition is general and can be also considered widely in healthcare context from the individual's point of view, and covers both the holistic nature of nursing and need of an individual. However, if the care need remains or is inadequately addressed, the care need is unmet. A care need is unmet when a problem exists for which no adequate solution has been offered.<sup>5</sup> Expanding this concept, unmet needs have been defined in terms of the difference between the healthcare services, here specifically nursing care needs, deemed necessary and the actual services received. This difference represents a measure of access to care<sup>6,7</sup> raising ethical issues. Interpreted at the level of the individual, unmet care needs are concerned with the local situation. At a more systematic level, improvements in service system efficiency taking 'whole-system' and person-centred<sup>8</sup> approaches, tailoring services and care to meet the needs of groups of individual older persons are under investigations.

Unmet care needs can herald threats to safety, the successful management of acute or chronic health problems and consequential negative health-related events.<sup>9,10</sup> As nurses represent the largest group of healthcare professionals,<sup>7</sup> unmet needs related to nursing care warrants closer examination and recognition. However, unmet nursing care needs from the point of view of older people, or care receivers in general, are different from those defined from the viewpoint of professionals or systems. This review focused on the older individual's perspective. However, the informant or identifier of unmet care needs could be the informal caregiver, family member or a professional.

All people are entitled to quality nursing care while being cared for in institutions as patients.<sup>11,12</sup> Older people are a heterogeneous group whose needs are increasingly diverse. Although some outdated stereotypes still may exist, new expectations, such as reducing inequity, dealing with diversity, enabling of choice and ageing in place, have to be managed.<sup>13</sup> These new expectations are dashed by studies demonstrating unmet care needs for many groups of patients, such as those with advanced cancer<sup>14,15</sup> and patients with dementia<sup>16–18</sup> or mental illnesses.<sup>19,20</sup>

Unmet care needs seem to occur largely in informational (30%–55%), psychological (18%–42%), physical (17%–48%) and functional (17%–37%) domains.<sup>15</sup> This finding is supported by Puts et al.<sup>21</sup> who, in a review focusing on older people suffering from cancer, found that unmet care needs existed mainly in psychological, information and physical domains. More specifically, a recent systematic review reporting on patient outcomes in acute hospital care settings showed associations between missed care and a range of poor patient outcomes. These outcomes were decreased patient satisfaction, increased medication errors, urinary tract infections,

patient falls, pressure ulcers, critical incidents, lower quality of care and patient readmissions.<sup>10</sup> In addition, Johnson et al.<sup>22</sup> reviewed the unmet care needs of people in home care settings and pointed out significant gaps in home care services for older people in Canada.

Unmet care needs have also been found, relating to patient outcomes, including death.<sup>9</sup> Other adverse events include falls,<sup>23</sup> inadequate nutrition,<sup>24</sup> depression,<sup>25</sup> incontinence,<sup>6</sup> discomfort or inconvenience,<sup>26</sup> and institutionalization,<sup>27</sup> which may lead to a decrease in quality of life.<sup>28</sup> These studies focused on unmet needs from the nurses' point of view.<sup>29</sup> However, it is necessary to analyse the health and well-being domains of the unmet needs of older people using patient views.<sup>8,13,30</sup> This analysis will be an important precursor to the development of care and services which are more individualized, tailored and supportive to older people,<sup>8,11</sup> responding to the need for person-centred care. There is an increasing number of older individuals with chronic conditions in the world.<sup>8</sup> There is also a desire to provide quality care assessments and provision for all, tailored to the individual's needs and based on correctly assessed care needs and provision as a right.<sup>31</sup>

Several studies have analysed patients' care or assistance needs, based on descriptions of, for example, Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs).<sup>32</sup> Other ways include lists of tasks based on nursing care using different terms and identified nursing duties or tasks.<sup>29</sup> This analysis requires a common and pragmatic understanding of 'unmet needs'. In a systematic review, Jones et al.<sup>29</sup> described three main approaches to understand unmet care needs using terms such as 'unfinished care', 'missed care' and 'the implicit rationing of nursing care'. However, studies conducted using these concepts focus mainly on nurses' reports of nursing activities and care left undone, and there is a dearth of evidence about defining the concept of 'unmet needs' from the perspective of older people. More research into unmet care needs using patients' views is needed, to provide a more detailed and balanced analysis of nursing care and the nursing care missed, unmet and unplanned. The information from this review will help in discussions of inequalities in access to care and care assessment, planning and provision; patients' rights; the provision of quality care; and missed care.

## Aims and objectives

The aim of this scoping review was to synthesize the findings of empirical research about the unmet nursing care needs of older people identifying the breadth, depth and scope of the current literature. The study is a part of the RANCARE project (CA15208 – Rationing – Missed Nursing care: An international and multi-dimensional problem).

The specific research questions were as follows:

- What are the methodological approaches used?
- Which concepts and terminology have been used?
- What unmet care needs have been identified?
- What ethical issues have been raised?

## Methods

This scoping review, after Arksey and O'Malley,<sup>33</sup> was used to identify gaps in the current research literature and so provide a guide for a future research agenda. The scoping review used the following process: (1) Identifying the research question(s), (2) Identifying relevant studies, (3) Study selection, (4) Charting the data and (5) Collating, summarizing and reporting the results.

### *Literature search for identifying relevant studies*

The systematic literature search used two international scientific databases, CINAHL (from earliest to December 2019) and Medline (PubMed, from earliest to December 2019) on 18 December 2019. These two databases have been found to be the most appropriate and comprehensive in the field of health sciences.<sup>34</sup> The search terms were ('unmet care needs' OR 'unmet need' OR 'unmet needs' OR 'unfinished care' OR 'missed care' OR 'care left undone' OR 'unmet nursing care') AND nursing AND (older OR aged OR elder\* OR senior) used in various phrases with the Boolean operators. Unmet care needs considered from older people's point of view did not exclude the participants, for example, professionals. Therefore, these terms were selected to cover all possibilities. Unfinished care, missed care and care left undone were included as these concepts refer to care that is based on needs assessment, but for many reasons was interrupted or not actualised. These selected terms were applied to the title and abstract level of the retrieved studies written in English. The search produced 120 studies (32 from CINAHL and 88 from Medline). In addition, a manual search of reference lists from the retrieved studies produced four additional studies increasing the total to 124. After this initial retrieval, 12 duplicates were removed, then the titles and abstracts were screened by two independent researchers (D.K., R.S.) against the inclusion and exclusion criteria (Figure 1).

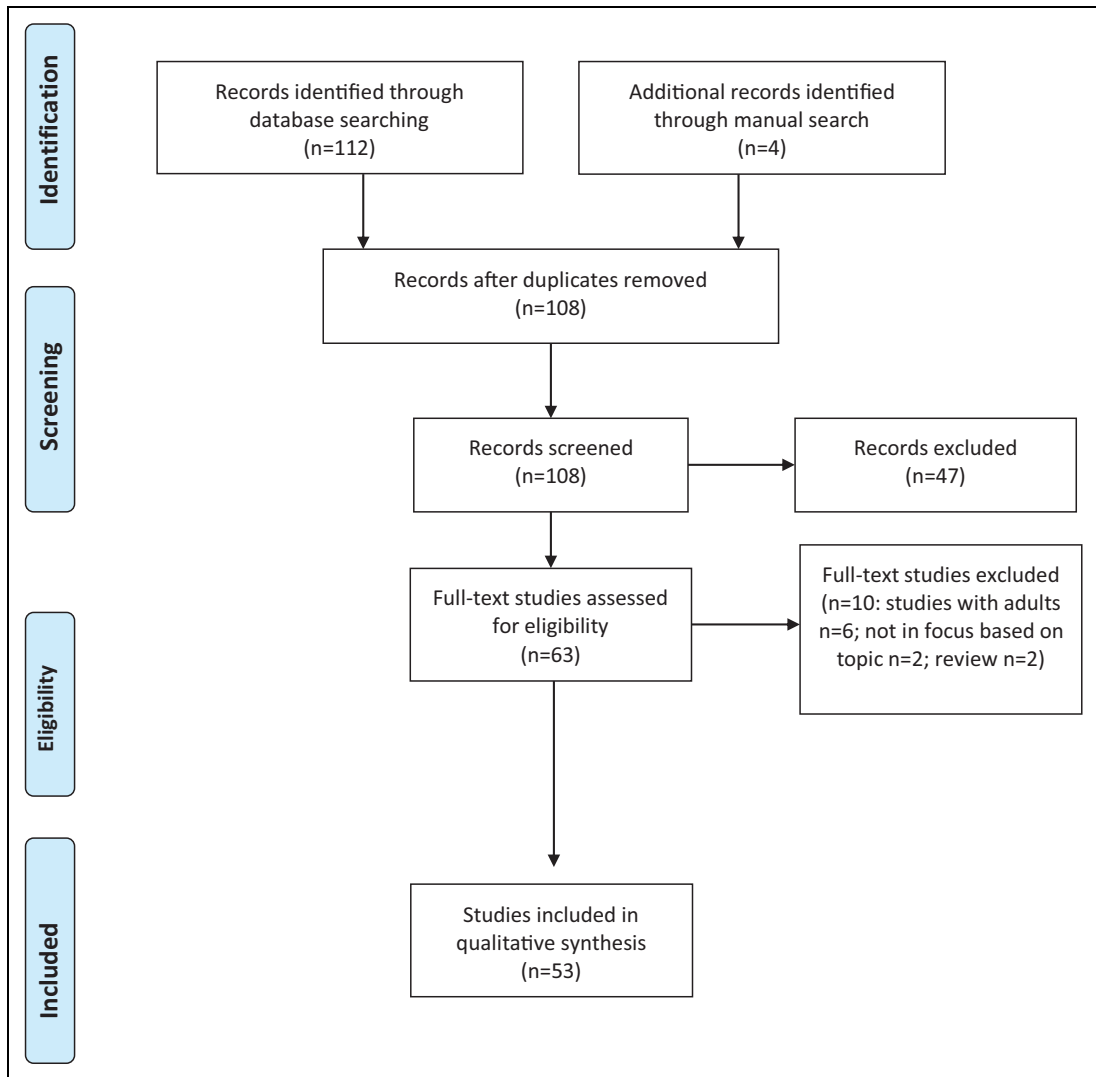
### *Inclusion and exclusion criteria for selecting the studies*

The predefined inclusion criteria were that the study (1) uses empirical research published in a peer-review journal; (2) is written in the English language; (3) focuses on the topic of interest – unmet nursing care needs of older people, and nursing care responsibility, performed by all levels of nurse professionals (unmet care needs, unmet needs, unfinished care, missed care, care left undone, unmet nursing care and care rationing); and (4) concerns older people, 65 or over,<sup>13</sup> their care settings or their context. Studies were excluded if they were (1) reviews, editorials, case studies or narratives; (2) studies not involving older people in their care settings; and (3) not about nursing care. Using the inclusion and exclusion criteria, 63 full-text studies were selected for further inspection.

The full-texts of the 63 studies were then examined. During this examination, the two independent researchers (D.K., R.S.) could not reach an agreement about the inclusion of 10 of the retrieved studies. A third researcher (M.S.) evaluated the studies, and consensus was reached between the three analysts. Fifty-three studies were included in the final analysis.

### *Data extraction and analysis*

The following information was collected and charted into working sheets in a table format by two researchers: author, year, country, study aim, study design, sampling method, sample size, informants, data collection, data analysis, healthcare context, research concept and main findings. The data were analysed using a content analysis approach by searching for responses applied to the stated research questions. Data condensed and charted in tables were then discussed in the research team and double checked by its accuracy (10% of the material). Unmet care needs were identified from the articles from the results sections, tabulated and then categorized according to the World Health Organization (WHO) classification.<sup>28</sup> Regarding the ethical issues, text in articles was read through identifying any ethical concern stated by the authors, such as words, sentences or phrases, and were tabularized and coded. Then the material was extracted and analysed by the constant comparison method. The expressions and wording used by both the participants in the studies, and study authors were used in the analysis wherever possible to reduce interpretation.



**Figure 1.** Flow chart of the literature search.

## Results

### *Description of the studies included*

Most of the reviewed studies were conducted in the United States ( $n = 22$ ), Australia ( $n = 3$ ), Canada ( $n = 2$ ) and Europe ( $n = 22$ ). In Europe, the studies were conducted in the United Kingdom ( $n = 10$ ), Switzerland ( $n = 3$ ), Netherlands ( $n = 2$ ), Finland ( $n = 2$ ), and Norway, Portugal, Poland, Germany and Spain, one in each. In addition, studies were conducted in Asia, Japan ( $n = 2$ ), and Korea and Taiwan, one in each.

Most of the studies were conducted in residential or nursing home contexts ( $n = 23$ ). The rest were conducted in community settings ( $n = 6$ ), home care ( $n = 7$ ), hospital settings ( $n = 5$ ), primary care ( $n = 5$ ), rural group practice ( $n = 1$ ) or in other settings ( $n = 6$ ). The sample sizes varied from 13 to 71,669 and

depended on the study design. In most of the studies, the informants were older people ( $n = 33$ ); their informal caregiver, relatives ( $n = 5$ ); or both ( $n = 2$ ). In some studies, healthcare professionals ( $n = 12$ ), including registered nurses ( $n = 3$ ), were the informants.

### *Methodological approaches of the studies*

The most frequently used methods were questionnaire surveys ( $n = 38$ ), followed by interviews ( $n = 7$ ), the use of administrative data and patient documentation ( $n = 4$ ), focus groups ( $n = 2$ ) and demographic data ( $n = 2$ ). Several instruments measuring unmet care needs were identified: the MISSCARE Survey<sup>35</sup>; the Basel Extent of Rationing of Nursing Care (BERNCA)<sup>36</sup> and adapted for nursing homes (BERNCA-NH)<sup>37</sup> in Switzerland; and the Camberwell Assessment of Need of the Elderly (CANE) developed by Reynolds and colleagues<sup>38</sup> from the original instrument Camberwell Assessment of Need (CAN)<sup>39</sup> using data from the United Kingdom, Sweden and the United States. The names of the instruments reveal that their target concepts vary, being missed care, rationing and unmet care needs, respectively.

### *Concepts and terminology used*

An unmet care need has been described as

a problem for which an individual is not receiving an appropriate assessment or intervention that could potentially meet the need.<sup>40</sup> (Using the Iliffe et al.<sup>41</sup> definition)

Most of the studies focused on the topic of unmet care needs of older people ( $n = 44$ , 83%). A small number of studies focused on care rationing or implicit rationing ( $n = 5$ , 9%) and missed care ( $n = 4$ , 8%). This last group of studies also included reports about the care that did not fit well with the needs of older people (Table 1). The concept of missed care was used systematically in studies where nurse professionals were the study informants and analysed their own written assessments of care outcomes.

In the literature reviewed, few studies described the theoretical basis for unmet needs in older people. Berridge and Mor<sup>88</sup> used the cumulative disadvantage theory of Dannefer and colleagues to explain the unmet needs in the context of health-related inequalities in older people. Similarly, Cohen-Mansfield et al.<sup>18</sup> examined unmet needs through the Unmet Needs Model developed earlier, focusing on the needs of older people with dementia. Exploring unmet spiritual needs of older people, Erichsen and Büssing<sup>71</sup> applied Alderfer's Existence, Relatedness and Growth model, which is an extension from Maslow's theory. Khandelwal et al.<sup>87</sup> compared unmet needs to inconsistent care. Martin et al.<sup>55</sup> and Wieczorowska-Tobis et al.<sup>81</sup> described the apparent imbalance between the assessed clinical needs of older people and the context in which optimal interventions were missed.

### *The unmet care needs of older people*

The majority of the studies concerned unmet care needs in three categories: physical, psychosocial and spiritual. The categorisation of different types of needs was adopted from the WHO International Classification of Functioning, Disability and Health Framework.<sup>28</sup>

Unmet physical care needs included three main categories: ADL, physical condition, and safety and monitoring (Table 2). ADL included six sub-categories including bathing, toileting, dressing, feeding, continence care and mobility. The category of physical conditions included, for example, oral health, skin care or needs related to pain management. Safety and monitoring included unmet care needs, for example, related to medication. Unmet psychosocial care needs were organized into six main categories concerned with emotional support, relationships, IADL, social services, social activities, and communication and

**Table 1.** Description of studies included in the analysis.

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Williams, <sup>42</sup> United Kingdom	To assess the community services for older disabled people.	Quantitative Descriptive	Random	N = 145 older people (65 years or older) receiving home help, home nursing, meals service or day care in previous 2 months	Questionnaires	Descriptive statistics	Rationing of care	42% of the population recognized primary needs by the community services, 26% were disabled, 16% lived alone or were widowed.
Hughes et al., <sup>43</sup> United States	To evaluate a long-term home care programme.	Quantitative Quasi-experiment	Random	N = 245 respondents - mainly White, female, widowed, living in unsubsidized private housing (n = 122 in experimental group; n = 123 in control group)	Questionnaire	Descriptive and inferential	Unmet needs	Respondents in the experimental sample demonstrated a decrease in physical ADL functioning.
Packham, <sup>44</sup> United Kingdom	To explore the comparison between GP and carer in the needs of residents in residential homes.	Quantitative	Random	N = 50 residents (65 years or older) living in four different private nursing homes (n = 35) or receiving local social service (n = 15); 11 residents had dementia	Questionnaire	Descriptive statistics	Unmet needs	GPs were not aware of care needs in eight patients. Carers were not aware of 34 medical problems of patients.
Paunonen and Häggman-Laitila, <sup>45</sup> Finland	To explore the life situation of older residents in nursing homes.	Quantitative	Stratified	N = 50 home-nursing residents, mainly females; the majority were between 70 and 79 years	Semi-structured questionnaire	Descriptive statistics Content analysis	Unmet needs	Overall, residents were satisfied, but unmet needs were identified in nutrition, sleep/rest, secretory activities and social contacts.
Pierson, <sup>46</sup> United States	To analyse the nurses' perceptions about knowledge related to foot care of older patients.	Quantitative	Stratified	N = 94 RNs providing care to older adults admitted to hospital, home setting and extended care setting	Questionnaires	Descriptive and inferential statistics	Unmet needs	9% of respondents confirmed that there were unmet needs related to assistance with foot care.
Okazy et al., <sup>47</sup> United States	To examine the social work discharge planning services for older patients.	Quantitative	Stratified random	N = 1077 older patients from five acute care hospitals, more than half of them were 75 years or older	Questionnaires	Descriptive statistics	Unmet needs	Only a minority of patients used social services after discharge. Use of social work services reduced the unmet needs in the medication, nursing and physical therapy.

(continued)

Table 1. (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
De Veer and de Bakker, <sup>48</sup> Netherlands	To determine the unmet care needs concerning the quality of home care.	Quantitative	Random	N = 311 older patients with chronic conditions (65 years or older), most of them were females	Questionnaires	Descriptive and inferential statistics	Unmet needs	A range of needs was identified, especially in the ADL, IADL, arrangements/technical needs, psychosocial needs, information and technical nursing service.
Koffman et al., <sup>49</sup> United Kingdom	To explore the characteristics of patients with acute mental disease.	Quantitative Descriptive	Random	N = 1510 patients with mental health problems (65 years or older) admitted to acute and assessment beds in mental health units, mainly White females	Demographic data, Survey	Descriptive	Unmet needs	24.4% of patients were identified as inappropriately located; 52.8% of them have unmet needs in the alternative service provision.
Mistiaen et al., <sup>50</sup> Netherlands	To explore the needs of older adults discharged from the hospital settings to the home.	Quantitative Descriptive	Purposive	N = 145 older adults (65 years or older) with a length of staying more than 3 days and discharged to home setting; most of them were females	Questionnaires	Descriptive statistics	Unmet needs	Unmet needs in the area of information were identified in 80% of older adults. Other difficulties were determined in housekeeping tasks. Almost 40% of older adults have reported unmet needs.
Clark and Delasega, <sup>51</sup> United States	To compare unmet care needs of older people in rural and urban settings.	Quantitative	Random	N = 106 older adults living in rural and urban settings; most of them were White females	Questionnaires	Descriptive and inferential statistics	Unmet needs	There were no significant differences in reporting unmet care needs. Lack of money, lack of readily available source of care were identified as the most often reasons for unmet needs.
Farran et al., <sup>52</sup> United States	To determine unmet care needs of caregivers of patients with psychiatric disease.	Qualitative Descriptive	Purposive	N = 10 caregivers; N = 9 nurses providing care to older patients with depression	Structured interview	Content analysis	Unmet needs	Unmet needs of caregivers included support, learning more about care-related tasks and roles, stress management. Nurses confirmed the focus should be placed on family and community support, care-related tasks, assistance with caregivers' learning needs.

(continued)



**Table 1.** (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Hawkins et al., <sup>53</sup> Canada	To examine the oral health status and treatment needs of older adults living in Canada.	Quantitative	Purposive	N = 1375 older adults (85 years or older) living in 17 nursing homes, three community centres, 44 seniors' apartment buildings	Survey	Descriptive statistics	Unmet needs	Higher prevalence of unmet needs in treatment was associated with lower utilization of dental care by older adults.
Sherriff et al., <sup>54</sup> United Kingdom	To assess the needs of older patients with diabetes in nursing homes.	Quantitative	Random	N = 145 nursing home residents with diabetes mellitus, most of them were females	Questionnaire	Descriptive statistics	Unmet needs	In patients with diabetes, unmet needs were identified in structured care with close liaison between all carers. Carers had unmet needs in communication and education about diabetes care.
Martin et al., <sup>55</sup> United Kingdom	To evaluate the needs of older residents in continuing care settings.	Quantitative	Random	N = 74 residents living in the nursing home and residential setting, almost all of them were females and had dementia	Questionnaires	Descriptive and inferential statistics	Unmet needs	Unmet needs were identified in the area of social disturbances in patients located in nursing homes and suitable daytime activities in patients located in residential care.
Wilson et al., <sup>56</sup> United Kingdom	To explore the role of a district nurse in meeting the needs of cancer patients and determine these needs.	Qualitative	Purposive	N = 27 patients with cancer living in the home care setting (71 interviews with patients and caregivers)	Interviews	Thematic analysis	Unmet needs	Unmet needs were similar in patients receiving help from district nurse and those who did not. Unmet needs were identified in the area of information, psychological support related to nutrition.
Kane et al., <sup>57</sup> United States	To examine outcomes of managed care of dually eligible older people.	Quantitative	Random	N = 1273 older patients living in a community setting; most of them were White females with comorbidities: hypertension, AMI, coronary heart disease, cancer, diabetes, dementia	Administrative data Survey	Descriptive and bivariate statistics	Unmet needs	Most of the unmet needs were determined in ADL and IADL activities.
Demiris et al., <sup>58</sup> United States	To examine the design and evaluation of a home-based tele-rehabilitation network for older patients.	Qualitative	Stratified	N = 43 healthcare professionals providing care to older people who lived in a rural community setting after discharge from acute care hospitals	Semi-structured interviews	N/A	Unmet needs	All respondents confirmed there were unmet needs in the area of medication noncompliance, limited access to the specialist and community-based services and social isolation.

(continued)

Table 1. (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Gaugler et al., <sup>59</sup> United States	To assess unmet care needs and key outcomes in patients with dementia.	Quantitative longitudinal	Random	N = 583 older adults with dementia living in long-term care; most of them were females and lived with caregiver	Questionnaires	Descriptive statistics and the Cox model	Unmet care needs	Unmet care needs were reported in ADL care tasks. Using Cox regression models confirmed that unmet needs in ADL are predictors of mortality, nursing home placements and loss to follow-up in patients with dementia.
Smith and Shay, <sup>60</sup> United States	To describe the predictors for oral health stability in long-term institutionalized patients.	Quantitative	Purposive	N = 868 older people living in long-term care facilities; most of them were females and were dependent in ADL	Medical records	Descriptive and bivariate statistics	Unmet needs	There were unmet needs in achieving the oral health stability explained by male gender, advanced age and more initial treatment needs.
Fernández-Olano et al., <sup>61</sup> Spain	To examine the factors associated with healthcare utilization by older people.	Quantitative Cross-sectional	Random	N = 787 older people living in community settings; most of them were females	Questionnaires	Descriptive and bivariate statistics	Unmet needs	Healthcare utilization was associated with perceived unmet care needs, lower educational level of patients and negative self-reported health status.
Roberts et al., <sup>62</sup> United Kingdom	To identify the nurse-led implementation of the single assessment process in primary care settings.	Mixed-method Prospective descriptive	Random Purposive	N = 944 patients (70 years or older) living in community settings N = 26 participants	Questionnaires Semi-structured interviews	Descriptive statistics Inductive content analysis	Unmet needs	According to the needs assessment, the most unmet needs were in the area of immunization and screening, medication management, communication disorders and brittle support system.
Atwal et al., <sup>63</sup> United Kingdom	To explore the older adults' experiences of rehabilitative services in acute healthcare.	Qualitative Interpretative	Purposive	N = 20 older adults with rehabilitation need during the acute care admission	Semi-structured interviews	Thematic content analysis	Unmet needs	Unmet needs were identified in rehabilitative services and discharge of older adults.
Drennan et al., <sup>64</sup> United Kingdom	To describe the ability to identify the older people at risk by primary care teams.	Quantitative Prospective cohort	Purposive	N = 320 older people living in community settings; most of them were females between 75 and 84 years	Questionnaires	Descriptive statistics and inferential statistics	Unmet needs	71% of older people had no unmet needs, 11% had two or more unmet needs, including mobility, memory, physical health, obtaining balanced meals, housekeeping tasks, social relationships and loneliness.

(continued)

**Table 1.** (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Chuang et al., <sup>65</sup> Taiwan	To illustrate the use of post-hospital care in stroke patients in Taipei and debate the policy implications.	Quantitative Longitudinal prospective	Random	N = 375 older patients with stroke; discharged from an acute care setting; most of them were female and aged 75 years and older	Questionnaires	Descriptive and inferential statistics	Unmet needs	Most unmet needs were reported on rehabilitative services and only a few on nursing care. Utilization of formal services was low.
Raiwo et al., <sup>66</sup> Finland	To explore the unmet needs of caregivers and their spouses with Alzheimer's disease.	Quantitative	Random	N = 1943 caregivers taking care of older patients with Alzheimer disease in the home setting	Questionnaires	Descriptive and inferential statistics	Unmet needs	Unmet needs were identified in the utilization of services, mainly in physiotherapy, financial support, house-cleaning and home respite; 69% of caregivers felt they could not choose the service they needed.
Park, <sup>67</sup> Korea	To assess the family caregivers' needs and the level of satisfaction with adult day care services for older stroke patients.	Quantitative Cross-sectional descriptive	Stratified	N = 119 caregivers taking care of older people with stroke who visited adult day healthcare service; the majority of older people were females and had paralysis	Questionnaires	Descriptive and inferential statistics	Unmet needs	The satisfaction with adult day care was moderate. The unmet needs were identified in physical therapy, speech therapy and patient-tailored exercise.
Slettebo et al., <sup>68</sup> Norway	To illustrate the experience of nurses and physicians of the clinical prioritization in nursing homes.	Qualitative Descriptive	Purposive	N = 6 physicians and 7 nurses who provided care in nursing home settings	Semi-structured interviews	Manifest content analysis	Implicit rationing of care	Three themes emerged from the analysis – overall changes related to providing good care in nursing homes, dilemmas prioritization and factors influencing the prioritization.
Naruse et al., <sup>69</sup> Japan	To determine the unmet needs of in-home nursing service during the daytime and nighttime and explore the essential characteristics of older patients who need this service.	Quantitative	Random	N = 280 caregivers taking care of older patients; most of them were females, lived with family members and had been diagnosed with severe dementia	Demographic information, Several measures	Descriptive statistics, CHAID technique	Unmet needs	Caregivers had more unmet needs at night than during the day. Nursing service at night was needed for patients with unstable disease and those receiving medication at night. Nursing service at day was required mainly for patients with eating difficulties.

(continued)

Table 1. (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Robison et al., <sup>70</sup> United States	To explore the unmet needs of older people in the process of transition from home care to a nursing home.	Mixed-method	Random	N = 1468 clients (65 years or older) transitioned from home care to nursing home; 16% of them had mental health condition; most of them were White females and had comorbidities: hypertension, rheumatoid/osteoarthritis, visual impairment, dementia, diabetes	Administrative data Care manager notes Focus groups	Descriptive and inferential statistics Systematic, verifiable analysis	Unmet needs	Unmet needs were reported in service use, an inadequate workforce, limited housing options or transportation barriers.
Erichsen and Büssing, <sup>71</sup> Germany	To assess the psychosocial and spiritual needs of older patients in residential care and explore the connection with mood states and life satisfaction.	Quantitative Cross-sectional	Purposive	N = 24 participants N = 100 older patients (65 years or older) living in residential or nursing homes; most of them were females	Questionnaires	Descriptive and inferential statistics	Unmet needs	Unmet needs were reported in the area of inner peace needs and needs for giving/generativity. Life satisfaction or quality of life was not considered a significant predictor.
Nagata et al., <sup>72</sup> Japan	To assess unmet needs for visiting nurse services among older people.	Quantitative Cross-sectional correlation	Stratified	N = 1594 older people (65 years or older) discharged from general hospitals to home care setting; patients had experienced a hospital stay of 14 days or longer	Questionnaires	Descriptive and bivariate statistics	Unmet needs	Older people had unmet needs in ADL, continuing medical/nursing care after discharge, especially in the utilization of visiting nurse services.
Arbaje et al., <sup>73</sup> United States	To describe the healthcare professionals' perceptions of transition care of older people, its improvement and P4P strategies.	Qualitative	Purposive and network sampling	N = 20 healthcare professionals providing care to older patients (65 years or older) who were successfully transitioned; most of the older patients were White females	Semi-structured in-depth interviews	Content analysis	Unmet needs	Three main themes emerged from the analysis – components and markers of transitional care, P4P strategies, healthcare professional perceptions of unmet needs related to transitional care.

(continued)

**Table 1.** (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Freedman and Spillman, <sup>74</sup> United States	To explore the disability and care needs among older people.	Quantitative Cross-sectional	Purposive	N = 8077 older adults (65 years or older) living in community settings; most of them were White females	Several measures	Descriptive and model estimates	Unmet needs	15% of older adults reported a consequence of unmet needs in the area of daily living activities, medication management, social contacts. Unmet needs of older people were identified in the ADL, medication management and social contacts. Unmet care needs are more prevalent in assisted living settings and retirement or senior housing.
Freedman and Spillman, <sup>75</sup> United States	To provide the estimates of the size and demographic characteristics of older people across different settings and determine their unmet needs.	Quantitative Cross-sectional descriptive	Purposive	N = 4023 respondents (65 years or older) living in residential care; most of them were White females	Questionnaires	Descriptive statistics and model estimates	Unmet needs	Unmet needs of older people were identified in the ADL, medication management and social contacts. Unmet care needs are more prevalent in assisted living settings and retirement or senior housing.
Stewart et al., <sup>76</sup> United Kingdom	To report the frequency and severity of dementia, depression, behavioural problems and medication use in nursing home residents.	Quantitative	Random	N = 301 nursing home residents; most of them were females with dementia or depression	Background information Questionnaires	Descriptive and inferential statistics	Unmet needs	High prevalence of behavioural and depressive symptoms and the use of psychotropic medication were the significant predictors of unmet needs.
Cohen-Mansfield et al., <sup>77</sup> United States	To identify which unmet needs contributed to the behavioural problems in patients with dementia.	Quantitative	Purposive	N = 89 nursing home residents with dementia with life expectancy for more than 3 months; stayed in the nursing home for at least 3 weeks; most of them were females	Observations Surveys	Descriptive and inferential statistics	Unmet needs	The most prevalent unmet needs were related to social contacts, meaningful activities and sensory deprivation.
Knopp-Sihota et al., <sup>77</sup> Canada	To illustrate the nature, frequency and factors associated with missed care in nursing homes.	Quantitative Cross-sectional	Stratified	N = 583 healthcare aides providing care to older patients living in nursing home settings	Survey	Descriptive and inferential statistics	Missed care	The most frequent missed activities were talking with residents and assistance with mobility of patients. The main reason for missed care has reported a lack of time.

(continued)

Table 1. (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Nelson and Flynn, <sup>78</sup> United States	To explore the prevalence and types of missed care and determine the relationship between the incidence of urinary tract infections and missed care in nursing homes.	Quantitative Secondary analysis	Random	N = 340 RNs providing direct care to older patients who lived in nursing homes	Questionnaires	Descriptive and bivariate statistics	Missed care	Overall, from 12 categories of missed care, 7 were significantly correlated with urinary tract infections. The most frequent missed activities were failure to administer medication on time and failure to provide adequate surveillance to patients.
Runci et al., <sup>79</sup> Australia	To examine the language needs of residential aged care residents.	Quantitative Cross-sectional	Cluster	N = 220 facilities (respondents were mainly directors of nursing or managers) providing residential care	Questionnaire	Descriptive statistics	Unmet needs	There were reported unmet needs in the area of language resource needs which are more prevalent in rural residential care facilities.
Züriga et al., <sup>37</sup> Switzerland	To identify the prevalence and causes of implicit rationing of care and determine its relationship to staffing, turnover and the work environment of nurses.	Quantitative Cross-sectional multi-centre	Random	N = 4307 direct care workers providing care to older residents living in nursing homes	Questionnaires	Inferential statistics	Implicit rationing of care	Healthcare workers reported the rationing of care in the area of social care of residents and documentation of care. Significant factors of the care rationing were lower staffing resources perceptions, poor teamwork, safety climate.
Brooks-Carthon et al., <sup>80</sup> United States	To explore the differences in the relationship between unmet care needs and acute myocardial infarction readmissions among Black and White older people.	Quantitative Cross-sectional	Purposive – older adults, hospitals Random – RNs	N = 69,065 older adults (65 years or older) with AMI; most of them were White and Black females who were readmitted within 30 days and had one of the comorbidities: hypertension, diabetes, chronic pulmonary disease, renal failure, peripheral vascular disorder N = 14,879 RNs = 253 hospitals	Administrative data, surveys	Descriptive and inferential statistics	Unmet nursing care	18% of Black patients more likely experience the readmission, especially in care units where the nursing care left undone, more specifically nurses were unable to talk/comfort patients, complete documentation or administer medications on time.

(continued)

**Table 1.** (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Ferreira et al., <sup>40</sup> Portugal	To assess the needs of older residents and to explore the relationship between these needs and clinical and demographic characteristics.	Quantitative Cross-sectional multi-centre	Purposive	N = 175 residents with the cognitive deficit or depressive symptoms living in nursing home settings; most of them were females	Questionnaires	Descriptive and inferential statistics	Unmet needs	The most prevalent unmet needs were identified in the area of daytime activities, eyesight/hearing, psychological distress and company. These needs were associated with the worst outcomes.
Wieczorowska-Tobis et al., <sup>81</sup> Poland	To assess the Camberwell Assessment of Need for the Elderly questionnaire in long-term institutions in Poland.	Quantitative Cross-sectional	Purposive	N = 173 residents (75 years or older) with the result of MMSE at least 15 points living in long-term care institutions	Questionnaires	Descriptive and inferential statistics	Unmet needs	The most prevalent unmet needs of residents were reported in the area of the company, memory, eyesight/hearing and psychological distress.
Züriga et al., <sup>82</sup> Switzerland	To develop and test the psychometric properties of the nursing home version of the BERNCA instrument.	QuantitativeInstrument development	Stratified	N = 4748 healthcare workers providing care to older people living in nursing homes	Questionnaire	Descriptive and inferential statistics	Implicit rationing of care	The four domains of the BERNCA were reported – ADL, caring–rehabilitation–monitoring, documentation and social care. The most rationed activities were identified in the documentation and rehabilitation and monitoring.
Brooks-Carthon et al., <sup>83</sup> United States	To explore the perceptions of Black older people in the area of care provided by the bedside nurse.	Qualitative Descriptive	Purposive	N = 19 older Black or African American requiring nursing home-level care; had experienced a hospital discharge within the past 60 days, had MMSE score more than 26 points; most of them were females with one of the comorbidities: hypertension, diabetes, heart failure	Semi-structured interviews	Qualitative content analysis	Unmet care needs	Four themes emerged from the analysis – perception of nursing care quality, perception of unmet care needs, nurse–patient communication, and nurse workload and competing demands.

(continued)

Table 1. (continued)

Author, country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Dhaini et al., <sup>64</sup> Switzerland	To determine the prevalence of implicit rationing of care in residential care and to examine the relationship between care rationing and healthcare worker's health.	Quantitative Cross-sectional multi-site	Stratified	N = 3239 care workers providing care to older people who lived in nursing homes	Questionnaire	Descriptive and inferential statistics	Implicit rationing of care	The most rationed nursing activities were reported in the area of caring—rehabilitation—monitoring. Rationing of daily living activities and caring—rehabilitation—monitoring was positively associated with care workers' joint pain and emotional exhaustion. The most prevalent were nursing activities related to unplanned care (toileting, answering bells) and rehabilitative care. The main reason for missed care was staffing shortages.
Henderson et al., <sup>65</sup> Australia	To examine the prevalence and leading causes of missed care in residential facilities in three regions of Australia.	Quantitative Cross-sectional survey	Random	N = 922 RNs, enrolled nurses, personal care assistants providing aged care	Questionnaire, Feedback with open questions	Descriptive and inferential statistics; Qualitative content analysis	Missed care	The most prevalent were nursing activities related to unplanned care (toileting, answering bells) and rehabilitative care. The main reason for missed care was staffing shortages.
Holup et al., <sup>66</sup> United States	To investigate the profile of residents admitted from home directly to nursing home.	Quantitative Retrospective analysis	Purposive	N = 71,669 residents (65 years or older) who were newly admitted to nursing homes and were mainly diagnosed with diabetes or dementia	Administrative data – data set	Descriptive and bivariate statistics	Unmet needs	Unmet needs were identified in the area of daily living activities.
Khandelwal et al., <sup>67</sup> United States	To report the proportion of bereaved family members who addressed the inconsistent care in terminally ill patients.	Quantitative Retrospective analysis	Purposive	N = 1212 bereaved family members taking care of older people (65 years or older) at the end-of-life stage; most of them were White females	Validated measures	Descriptive and inferential statistics	Unmet needs	13% of family members reported that the care was inconsistent with decedents' wishes. The most prevalent unmet needs related to inconsistent care were pain management and communication issues.
Marrero et al., <sup>23</sup> United States	To investigate the fall incidence for older people transitioned from the institute to the community.	Quantitative Prospective cohort study	Purposive	N = 648 older people (65 years or older) who were transitioned from nursing homes to community settings; most of them were females with depressive syndrome	Administrative data Survey	Descriptive and inferential statistics	Unmet care needs	14.9% of older people reported unmet medical needs. Unmet needs were identified in the area of physical, verbal or financial mistreatment. Significant predictors of falls were mistreatment, unmet medical needs and depressive symptoms.

(continued)



**Table 1.** (continued)

Author; country	Aim	Study design	Sampling method	Sample size, informants	Data collection	Data analysis	Concept	Findings
Berridge and Mor, <sup>86</sup> United States	To identify the differences in the prevalence of unmet needs among the Black and White older people.	Quantitative	Stratified and clustered	N = 6459 older Black and White community dwellings (65 years or older)	Questionnaires	Descriptive and inferential statistics	Unmet needs	Black older people reported more unmet needs in ADL, IADL, and mobility activities than White older people.
Makaroun et al., <sup>89</sup> United States	To explore the relationship between healthcare transitions at the end-of-life and the assessment of EOL quality of life by bereaved family members and friends.	Quantitative Prospective cohort study	Purposive	N = 1653 family members or friends taking care of older people (65 years or older) at the end-of-life stage	Survey	Descriptive and inferential statistics	Unmet needs	Bereaved family or friends reported that decedents were treated without respect, needed more spiritual support. Bereaved respondents reported that they were not keep informed about the person's condition. Also, they rated the quality of life worse when there was a late transition.
Blackman et al., <sup>90</sup> Australia	To explore the frequency of missed care and its reasons in Australian residential aged care.	Quantitative Cross-sectional with the multi-variate approach	Purposive	N = 2467 care workers providing care to older patients who lived in residential aged care	Survey	Descriptive and inferential statistics	Missed care	Predictors of missed care in residential aged care were provided more staff, staff adequacy, residence owner, type of residence, size of residence, role in residents' care, working as a team, undertaking extra shifts. Most of them are under the control of residential care management.

GP: general practitioner; ADL: Activities of Daily Living; IADL: Instrumental Activities of Daily Living; RN: registered nurse; BERNCA: Basel Extent of Rationing of Nursing Care; AMI: Acute Myocardial Infarction; CHAID: Chi-square automatic interaction detection; MMSE: Mini-Mental State Examination; P4P: pay-for-performance; EOL: end-of-life.

**Table 2.** Overview of unmet care needs categories.

Categories of unmet needs	Subcategories of unmet needs
<b>Unmet physical care needs</b>	<b>Activities of daily living</b> (Holup et al., <sup>86</sup> Martin et al., <sup>55</sup> Oktay et al. <sup>47</sup> ) <ul style="list-style-type: none"> <li>○ <b>Bathing</b> (Berridge and Mor,<sup>88</sup> Brooks-Carthon et al.,<sup>83</sup> Chuang et al.,<sup>65</sup> Farran et al.,<sup>52</sup> Freedman and Spillman,<sup>74,75</sup> Gaugler et al.,<sup>59</sup> Hughes et al.,<sup>43</sup> Kane et al.,<sup>57</sup> Naruse et al.<sup>69</sup>)</li> <li>○ <b>Toileting</b> (Brooks-Carthon et al.,<sup>83</sup> Chuang et al.,<sup>65</sup> Farran et al.,<sup>52</sup> Freedman and Spillman,<sup>74,75</sup> Gaugler et al.,<sup>59</sup> Henderson et al.,<sup>85</sup> Kane et al.,<sup>57</sup> Packham<sup>44</sup>)</li> <li>○ <b>Dressing</b> (Berridge and Mor,<sup>88</sup> Chuang et al.,<sup>65</sup> Farran et al.,<sup>52</sup> Freedman and Spillman,<sup>75</sup> Hughes et al.,<sup>43</sup> Kane et al.,<sup>57</sup> Naruse et al.<sup>69</sup>)</li> <li>○ <b>Feeding</b> (Berridge and Mor,<sup>88</sup> Brooks-Carthon et al.,<sup>83</sup> Chuang et al.,<sup>65</sup> Farran et al.,<sup>52</sup> Gaugler et al.,<sup>59</sup> Naruse et al.<sup>69</sup>)</li> <li>○ <b>Continence care</b> (Berridge and Mor,<sup>88</sup> Hughes et al.,<sup>43</sup> Martin et al.,<sup>55</sup> Naruse et al.,<sup>69</sup> Packham,<sup>44</sup> Paunonen and Häggman-Laitila<sup>45</sup>)</li> <li>○ <b>Mobility</b> (Berridge and Mor,<sup>88</sup> Drennan et al.,<sup>64</sup> Knopp-Sihota et al.,<sup>77</sup> Martin et al.,<sup>55</sup> Naruse et al.,<sup>69</sup> Packham<sup>44</sup>) <ul style="list-style-type: none"> <li>□ <i>Up/down stairs</i> (De Veer and de Bakker<sup>48</sup>)</li> <li>□ <i>Moving outdoor</i> (De Veer and de Bakker,<sup>48</sup> Freedman and Spillman<sup>74</sup>)</li> <li>□ <i>Walking indoor</i> (Chuang et al.,<sup>65</sup> Freedman and Spillman,<sup>74</sup> Henderson et al.<sup>85</sup>)</li> </ul> </li> </ul>
	<b>Physical condition</b> (Blackman et al., <sup>90</sup> Drennan et al., <sup>64</sup> Martin et al., <sup>55</sup> Marrero et al., <sup>23</sup> Mistiaen et al. <sup>50</sup> ) <ul style="list-style-type: none"> <li>● <b>Foot and nail care</b> (De Veer and de Bakker,<sup>48</sup> Knopp-Sihota et al.,<sup>77</sup> Pierson,<sup>46</sup> Roberts et al.,<sup>62</sup> Sherriff et al.<sup>54</sup>)</li> <li>● <b>Skin care</b> (De Veer and de Bakker,<sup>48</sup> Roberts et al.<sup>62</sup>) <ul style="list-style-type: none"> <li>○ <i>Care of pressure sores</i> (De Veer and de Bakker<sup>48</sup>)</li> <li>○ <i>Wound care management</i> (Chuang et al.<sup>65</sup>)</li> </ul> </li> <li>● <b>Oral and dental care</b> (Clark and Dellasega,<sup>51</sup> Dhaini et al.,<sup>84</sup> Hawkins et al.,<sup>53</sup> Knopp-Sihota et al.,<sup>77</sup> Smith and Shay<sup>60</sup>)</li> <li>● <b>Nutrition care</b> (Drennan et al.,<sup>64</sup> Paunonen and Häggman-Laitila,<sup>45</sup> Wilson et al.<sup>56</sup>) <ul style="list-style-type: none"> <li>○ <i>Support in strict diet</i> (De Veer and de Bakker<sup>48</sup>)</li> </ul> </li> <li>● <b>Pain management</b> (Khandelwal et al.,<sup>87</sup> Makaroun et al.,<sup>89</sup> Roberts et al.<sup>62</sup>) <ul style="list-style-type: none"> <li>○ <i>Lack of timely pain medication, ineffective pain treatment, disregard for patient's pain from nursing staff</i> (Brooks-Carthon et al.<sup>83</sup>)</li> </ul> </li> <li>● <b>Adequate sleep/rest</b> (Paunonen and Häggman-Laitila<sup>45</sup>)</li> <li>● <b>Dyspnea</b> (Makaroun et al.<sup>89</sup>)</li> <li>● <b>Speech</b> (Clark and Dellasega,<sup>51</sup> Park,<sup>67</sup> Roberts et al.<sup>62</sup>)</li> <li>● <b>Memory issues</b> (Drennan et al.,<sup>64</sup> Ferreira et al.,<sup>40</sup> Martin et al.,<sup>55</sup> Wieczorowska-Tobis et al.<sup>81</sup>)</li> <li>● <b>Sensory deprivation</b> (Cohen-Mansfield et al.<sup>18</sup>) <ul style="list-style-type: none"> <li>○ <i>Vision care</i> (Clark and Dellasega,<sup>51</sup> Ferreira et al.,<sup>40</sup> Sherriff et al.,<sup>54</sup> Wieczorowska-Tobis et al.<sup>81</sup>)</li> <li>○ <i>Hearing care</i> (Ferreira et al.,<sup>40</sup> Wieczorowska-Tobis et al.<sup>81</sup>)</li> </ul> </li> <li>● <b>Safety/monitoring</b> (Ferreira et al.,<sup>40</sup> Kane et al.,<sup>57</sup> Martin et al.,<sup>55</sup> Nelson and Flynn<sup>78</sup>) <ul style="list-style-type: none"> <li>○ Perceived specific nursing care unmet needs <ul style="list-style-type: none"> <li>■ Answering call bells in less than 5 min (Dhaini et al.,<sup>84</sup> Henderson et al.,<sup>85</sup> Zúñiga et al.<sup>37,82</sup>)</li> <li>■ Assistance by injections (De Veer and de Bakker<sup>48</sup>)</li> <li>■ Physical assessments (Clark and Dellasega<sup>51</sup>)</li> <li>■ Turning of patient in bed during the night (Slettebø et al.<sup>68</sup>)</li> <li>■ Care of tracheotomy, Foley catheter or nasogastric tube (Chuang et al.<sup>65</sup>)</li> </ul> </li> </ul> </li> </ul>

(continued)

**Table 2.** (continued)

Categories of unmet needs	Subcategories of unmet needs
<b>Unmet psychosocial care needs</b>	○ Perceived specific medical care unmet needs
	■ Treatment (Oktay et al. <sup>47</sup> )
	● Aggression, arthritis, depression (Packham <sup>44</sup> )
	● Cognitive impairment (Holup et al. <sup>86</sup> )
	■ Screening and immunisation (Roberts et al. <sup>62</sup> )
	● Blood pressure screening (Clark and Dellasega, <sup>51</sup> Packham, <sup>44</sup> Sherriff et al. <sup>54</sup> )
	● Cholesterol screening (Clark and Dellasega <sup>51</sup> )
	○ Medication management (Oktay et al., <sup>47</sup> Roberts et al. <sup>62</sup> )
	■ Medication errors (Berridge and Mor, <sup>88</sup> Freedman and Spillman <sup>74,75</sup> )
	■ Administer medications on time (Brooks-Carthon et al., <sup>83</sup> Nelson and Flynn <sup>78</sup> )
	■ Medication noncompliance (Demiris et al. <sup>58</sup> )
	<b>Emotional support</b> (Dhaini et al., <sup>84</sup> Raivio et al., <sup>66</sup> Zúñiga et al. <sup>37</sup> )
	○ Ageing (De Veer and de Bakker <sup>48</sup> )
	○ Acceptance of illness (De Veer and de Bakker <sup>48</sup> )
	○ Depressive symptoms (Stewart et al. <sup>76</sup> )
○ Psychological distress (Blackman et al., <sup>90</sup> Ferreira et al., <sup>40</sup> Makaroun et al., <sup>89</sup> Martin et al., <sup>55</sup> Wiecezowska-Tobis et al. <sup>81</sup> ) Anxiety (Makaroun et al. <sup>89</sup> )	
<b>Relationships</b>	
○ Social relationships (Drennan et al. <sup>64</sup> )	
■ Social interaction (Cohen-Mansfield et al., <sup>18</sup> Demiris et al., <sup>58</sup> Drennan et al., <sup>64</sup> De Veer and de Bakker, <sup>48</sup> Ferreira et al., <sup>40</sup> Martin et al., <sup>55</sup> Paunonen and Häggman-Laitila, <sup>45</sup> Wiecezowska-Tobis et al. <sup>81</sup> )	
■ Vulnerability to abuse or neglect from others (Martin et al. <sup>55</sup> )	
○ Intimate relationships (Ferreira et al., <sup>40</sup> Martin et al., <sup>55</sup> Wiecezowska-Tobis et al. <sup>81</sup> )	
<b>Communication</b> (Khandelwal et al., <sup>87</sup> Knopp-Sihota et al., <sup>77</sup> Slettebø et al., <sup>68</sup> Wiecezowska-Tobis et al. <sup>81</sup> )	
○ Verbal mistreatment (Marrero et al. <sup>23</sup> )	
○ Fear of communication with nursing staff (Brooks-Carthon et al. <sup>83</sup> )	
○ Conversation with patient/resident or family (Brooks-Carthon et al., <sup>80</sup> Dhaini et al., <sup>84</sup> Makaroun et al. <sup>89</sup> )	
○ Language resource need (Runci et al. <sup>79</sup> )	
<b>Information needs</b> (Wiecezowska-Tobis et al. <sup>81</sup> )	
○ Management of side effects of cancer therapy (Wilson et al. <sup>56</sup> )	
○ Caregivers' information about care of patients (Wilson et al. <sup>56</sup> )	
○ Patients' condition (Makaroun et al. <sup>89</sup> )	
○ The course and signs of recovery (Mistiaen et al. <sup>50</sup> )	
○ Contacting fellow-sufferers (De Veer and de Bakker <sup>48</sup> )	
○ Healthcare insurance coverage (Mistiaen et al. <sup>50</sup> )	
○ Prescriptions (De Veer and de Bakker, <sup>48</sup> Mistiaen et al. <sup>50</sup> )	
■ Use of psychotropic medications (Stewart et al. <sup>76</sup> )	
○ Transition process (Arbaje et al. <sup>73</sup> )	
<b>Social activities</b>	
○ Daytime activities (De Veer and de Bakker, <sup>48</sup> Ferreira et al., <sup>40</sup> Martin et al., <sup>55</sup> Wiecezowska-Tobis et al., <sup>81</sup> Zúñiga et al. <sup>37,82</sup> )	
○ Meaningful activities (Cohen-Mansfield et al. <sup>18</sup> )	
○ Going outside home/building (Berridge and Mor, <sup>88</sup> Freedman and Spillman, <sup>74,75</sup> Zúñiga et al. <sup>37</sup> )	

(continued)

**Table 2.** (continued)

---

 Categories of unmet needs    Subcategories of unmet needs
 

---

**Instrumental activities of daily living** (Berridge and Mor<sup>88</sup>)

- **Household needs** (De Veer and de Bakker,<sup>48</sup> Drennan et al.,<sup>64</sup> Freedman and Spillman,<sup>75</sup> Koffman et al.,<sup>49</sup> Martin et al.,<sup>55</sup> Mistiaen et al.<sup>50</sup>)
- **Practical support in daily living** (Koffman et al.,<sup>49</sup> Robison et al.<sup>70</sup>)
  - *Shopping* (Berridge and Mor,<sup>88</sup> De Veer and de Bakker,<sup>48</sup> Farran et al.,<sup>52</sup> Freedman and Spillman<sup>74</sup>)
  - *Preparing meals* (Berridge and Mor,<sup>88</sup> Farran et al.,<sup>52</sup> Freedman and Spillman<sup>74</sup>)
  - *Paying bills* (Farran et al.<sup>52</sup>)
  - *Running errands* (Farran et al.<sup>52</sup>)
  - *Laundry* (Freedman and Spillman<sup>74</sup>)
  - *Ironing clothes* (De Veer and de Bakker<sup>48</sup>)

**Social services** (Roberts et al.<sup>62</sup>)

- *Lack of available community services* (Demiris et al.,<sup>58</sup> Nagata et al.,<sup>72</sup> Raivio et al.,<sup>66</sup> Robison et al.,<sup>70</sup> Williams<sup>42</sup>)
  - *Lack of role of the district nurse* (Wilson et al.<sup>56</sup>)
  - *Visiting nurse service* (Nagata et al.,<sup>72</sup> Naruse et al.<sup>69</sup>)
  - *Home visits (need for family doctor)* (Clark and Dellasega<sup>51</sup>)
  - *Services for patients with mental health problems* (Robison et al.<sup>70</sup>)
- *Lack of available rehabilitative services* (Atwal et al.,<sup>63</sup> Chuang et al.<sup>65</sup>)
  - *Activation or rehabilitative care* (Dhaini et al.,<sup>84</sup> Henderson et al.,<sup>85</sup> Oktay et al.,<sup>47</sup> Park,<sup>67</sup> Zúñiga et al.<sup>37,82</sup>)
  - *Exercise program* (Clark and Dellasega<sup>51</sup>)
  - *Therapeutic massage* (Clark and Dellasega<sup>51</sup>)
  - *Patient-tailored exercise* (Park<sup>67</sup>)
- *Limited access to professional or specialist* (Clark and Dellasega,<sup>51</sup> Demiris et al.,<sup>58</sup> Fernández-Olano et al.,<sup>61</sup> Koffman et al.<sup>49</sup>)
  - *Lack of transportation* (Clark and Dellasega,<sup>51</sup> De Veer and de Bakker,<sup>48</sup> Robison et al.<sup>70</sup>)
  - *Available help with transferring* (Chuang et al.,<sup>65</sup> Kane et al.<sup>57</sup>)
- *Discharge and documentation*
  - *Discharge planning* (Brooks-Carthon et al.,<sup>83</sup> Nagata et al.<sup>72</sup>)
    - *Role of hospital social workers* (Oktay et al.<sup>47</sup>)
  - *Incomplete documentation* (Brooks-Carthon et al.,<sup>80</sup> Zúñiga et al.<sup>37,82</sup>)
- *Late transition* (Makaroun et al.<sup>89</sup>)

**Financial support** (Clark and Dellasega<sup>51</sup>)

- *Financial mistreatment* (Marrero et al.<sup>23</sup>)
- *Lack of personal finances* (Martin et al.<sup>55</sup>)

**Unmet spiritual needs****Spiritual needs** (Makaroun et al.<sup>89</sup>)

- *Plunge into beauty of nature* (Erichsen and Büssing<sup>71</sup>)
  - *Feel connected with family* (Erichsen and Büssing<sup>71</sup>)
  - *Be invited again by friends* (Erichsen and Büssing<sup>71</sup>)
  - *Reflect previous life* (Erichsen and Büssing<sup>71</sup>)
  - *Maximize the life potential* (Blackman et al.<sup>90</sup>)
  - *Be complete and safe* (Erichsen and Büssing<sup>71</sup>)
  - *Turn to someone in a loving attitude* (Erichsen and Büssing<sup>71</sup>)
  - *Solace someone* (Erichsen and Büssing<sup>71</sup>)
  - *Feel respected by nursing staff* (Brooks-Carthon et al.,<sup>83</sup> Makaroun et al.<sup>89</sup>)
  - *Not feel belittled by nursing staff* (Brooks-Carthon et al.<sup>83</sup>)
  - *Inconsistent care* (Makaroun et al.<sup>89</sup>)
-

information needs. Macro-level reasoning was offered for some of these unmet care needs, such as the lack of available community nursing services or rehabilitative services or limited access to professional and/or specialist services. Finally, unmet spiritual needs were reported least and concerned, mostly religious-spiritual needs (Table 2).

The review found some context-specific assessments of unmet care needs reporting them to be common in traditional community housing and most prevalent in retirement, senior housing and assisted living settings. However, some authors found that unmet care needs are prevalent in all older people care settings.<sup>74,75</sup> The reasons for the unmet care needs included poor language-resourced and culturally bound care, not meeting the individual cultural differences, and were found less often in urban areas compared to rural areas.<sup>79</sup> Alongside this, minimal social interaction, due to the language barriers, was found to be associated with a sense of isolation. Negative outcomes due to unmet care, associated with harm, were reported by Gaugler et al.<sup>59</sup> who found that care recipients with dementia and associated increased unmet care needs were 1.77 times more likely to move from home to a nursing home and were 1.37 more likely to die than those with care needs that were met.

### *Raised ethical issues*

Ethical issues related to the unmet care needs of older people were reported in some studies. Most of the ethical issues raised were related to the clinical prioritization of nursing care by tasks<sup>37,68,82,84</sup> associated with failing to carry out nursing care activities,<sup>77,83,85</sup> or shortcomings in providing good care for older people.<sup>68,77</sup> Several studies explored the consequences of failing to carry out nursing care in the context of falls,<sup>23</sup> urinary tract infections,<sup>78</sup> patient satisfaction,<sup>50</sup> or instrumental and daily living activities such as wet or soiled clothes, staying at home/inside the residential care facility, went without a hot meal/getting dressed/groceries/paying bills/clean laundry or eating,<sup>74,75</sup> raising questions about the respect of the ethical principle of non-maleficence. In other studies, patients complained (or indicated) that they were treated with disrespect<sup>73,83,87</sup> especially during the transition of older people<sup>73</sup> or at the end-of-life stage,<sup>87</sup> felt powerless or belittled,<sup>83</sup> felt ignored<sup>63</sup> or neglected<sup>55,73</sup> by nurses, had restricted autonomy in residential care settings,<sup>44</sup> or needed to use assertive self-advocacy to express their needs.<sup>83</sup> These results identify some poor experiences and demonstrate how strongly some people feel about this in their care. Some patients unable to speak for themselves and those having more comprehensive needs are even at risk of being neglected altogether.<sup>68</sup> In addition, the need to further support patients' confidentiality,<sup>56</sup> self-esteem<sup>71</sup> and equal access to care<sup>68</sup> were highlighted in several studies. Another issue raised is the right to information from healthcare professionals in preparation for discharge; most of older people's informational needs were concerned with the course and signs of recovery. However, some of the healthcare professionals did not even consider the possibilities (financial, self-care, mainly in housekeeping) of older people, so the information were often useless for them.<sup>50</sup> One study explored the role of nursing tasks delegation in the provision of care to residents. More qualified nurses often failed to instruct their less-qualified colleagues about proper care of the residents, but delegated some tasks on them (e.g. turning during the night shift) and omitted their responsibility for caring which often led to serious consequences for residents.<sup>68</sup>

Two studies reported ageism as the main cause of unmet care needs.<sup>53,68</sup> In addition, Ferreira et al.<sup>40</sup> revealed that unmet care needs were associated with the worst patient outcomes and that the needs of institutionalized older patients often went under-diagnosed and thus untreated. Stewart et al.<sup>76</sup> found that the prevalence of depressive and challenging behaviour in older people was often treated with psychotropic medication rather than more social methods, which can be considered a sign of unmet care needs at the institutional level.

Another type of discrimination, regarding the unmet care needs of older people, was reported, based on race.<sup>88</sup> Black people were more likely to experience discrimination, unmet care needs and their

consequences.<sup>80,83</sup> There is also evidence of nurses' and other health professionals' lack of recognition of the need for rehabilitation<sup>63</sup> neglecting the needs of those recovering from severe conditions and leading to, for example, prolonged immobilization. This suggests that the promotion of health, well-being and the support of independence was lacking, and this neglect may lead to harm through the loss of independence.

## Discussion

Studies exploring unmet nursing care needs here include the point of view of patients, clients and individuals, while the missed nursing care literature is more often used in analysing omissions of care from the point of view of professionals. Although this scoping review includes limited empirical evidence, there is enough to demonstrate that the unmet nursing care needs of older people, including fundamental human needs, has been investigated from a number of perspectives and is significant. The review has revealed that it is not only missed care but also the quality of care<sup>83</sup> and the varied reasons for missed care that are also important. Although the quality of care is regulated in Europe and globally, for example,<sup>8,12</sup> the level of unmet care needs of older people is significant, occurring in many countries, in all care settings for older people. Thus, these significant and varied care issues are not local or even national phenomena, but a concern for nursing globally. The ethical issues that surround some of the unmet needs only add to the seriousness of these global nursing issues and may mean shortcomings in seeing the individual and in the person-centeredness of nursing care.

An examination of the concepts and terminology used in the reviewed studies with different approaches pointed to some systematic and some inconsistent use of the concepts. However, these different uses led to similar results. Of the three types of care needs categorized, physical, psychosocial and spiritual, the majority reported were omissions of physical care focused on ADL. This means that across a variety of different care settings, care provision is not always meeting the fundamental physical care needs of older people. Many older individuals have chronic conditions, affecting various parts of their body either locally, such as oral health and foot health, for example,<sup>46,48,54,62,77</sup> or systemically such as chronic lung and heart disease. Such unmet care needs may cause harm either directly or indirectly and are associated with a reduction of stable and healthy ageing at home or in a community.<sup>13</sup> Moreover, this finding warrants serious recognition. There is very strong ethical element and clinical care as physical unmet care needs have been found to be signs of undignified care.<sup>91</sup> Provision of adequate physical care is an ethical issue as is the non-provision.

The most obvious reason for unmet care needs is neglect, which is reported in several studies and is complex. This complexity may be concerned with the inadequate assessment of individuals' needs prior to planning and care provision.<sup>92</sup> Many of the studies reviewed were carried out in non-hospital environments where the number of nursing staff is lower and the ratio of Registered Nurses to nursing assistants (e.g. licenced practical nurses) is less than that in a hospital context,<sup>7</sup> even though in many such settings, patient dependency levels can be quite high. Therefore, older people in non-hospital care settings are more likely to be cared for by people who do not have the education and competences required to assess old people's needs sufficiently well.<sup>93,94</sup> However, this review focused on nurse professionals, not other workers such as social care or technical staff.

Given the variety of unmet nursing care needs (Table 2), closer investigation is needed. Based on the definitions of missed care, it is not just the work that is missed that needs to be considered,<sup>10</sup> but how the care assessment and plan are managed to completion also requires attention. The Institute of Medicine<sup>11</sup> and the WHO<sup>8,13</sup> have recognized the importance of including older people's and patients' perspectives in safeguarding older individuals' health and well-being. Demonstrations of unmet care needs may be associated with the failure of nurses and other care assessors to follow this current advice and not facilitating older peoples' participation in their care.<sup>95</sup> Some studies reviewed suggested this was because of the use of specific instruments to assess the older person's condition and plan care that do not require interaction.<sup>37,82</sup> This lack of interaction is demonstrated in most of the studies reviewed, as older people's needs are described from the researchers' or health professionals' frame of reference. A reduction of unmet care needs and inadequate care

provision may be achieved by considering the older person's perspective more thoroughly. This might have to take into account the generation difference between the older person and the care provider.

Age discrimination, ageism, has been reported in acute healthcare settings about older people, usually those with complex needs. These older people, requiring longer periods of recuperation and rehabilitation following an episode of ill health, are troublesome to staff working in a system with rapid turnover of patients.<sup>96</sup> In many societies, the lives of the older people are not considered of equal worth to the lives of younger people<sup>97</sup> and the allocation of resources is not needs-based but according to views on how beneficial people are to society.<sup>98</sup> Although this ageism is mainly observed at the macro level, the process influences nurses' decision-making, for example, when rationing their time.<sup>99,100</sup> In addition, there are serious concerns suggesting that ageism was the main cause of unmet care needs<sup>53,68,100,101</sup> demonstrating outdated stereotypes for considering older individuals.<sup>13</sup> This type of ageism has been reported as counter-effective in cardiac care. Recently, it has been found that older individuals recover better from serious cardiac conditions if admitted to an Intensive Cardiac Unit (ICU)<sup>102</sup> with their condition(s) considered holistically.<sup>103</sup> Supporting the use of the ICU in this context, Levy et al.<sup>97</sup> found that reduction of ageism is cost-effective and improves the health of the ageing population.

Related to the concept of unmet nursing care needs is the extent needs are met under different circumstances. For example, some older persons are not assertive, and they do not or are not able to demand that their needs be met.<sup>18</sup> For those able to be assertive but are not, the relationship with the health professional is important. It has been reported that some older people think they are a burden and do not ask for what they want, being satisfied with what is done for them.<sup>104</sup>

It can be argued that older people can improve their own health and have a responsibility to do what they can to age well.<sup>94</sup> However, not all older individuals have the options, capacity, abilities or knowledge to age well appropriately on their own and need assistance.<sup>28,105</sup> Where the capacity of older people falls below a level where they can look after themselves, the burden of some care requirements are frequently shared with unpaid family caregivers who provide significant care, including medical care and social support, to their loved ones.<sup>66,103</sup> Careful consideration is required about where the line is between informal caregiving and professional nursing practice with regard to knowledge, skill, attitudes and competence and the ethical management of care.

This review has raised implications for nursing care that calls for further research, particularly around the need for more transparent ethical stances in decision-making about the assessment planning and provision of care. This care should comply with the principles of care quality and meet the fundamental rights of older people demonstrating respect and equality. Serious concern exists if nursing care does not meet these fundamental values, especially if they lead to the neglect of older people.

Research into meeting the needs of older people is needed: at the macro level, for example, strategic resource allocation and population issues of access to healthcare<sup>7,94</sup>; at the service level, the system level, within populations in care institutions and including political decisions. Research is also needed at the level of the individual where unmet needs might arise from, for example, professionals' ability, competence, and implicit and explicit rationing, causing distress and poor health outcomes.

### ***Strengths and limitations***

The scoping review guidelines and search protocol were followed, which made the process transparent and strengthened the review. The review was further strengthened by the independent work of three researchers and discussion leading to consensus about the inclusion of citations for full-text screening.<sup>106</sup> As the nature of the scoping review is to describe the status of the research in a specific topic, a quality appraisal of the included research was not included in the review protocol.<sup>98</sup> Two databases were used, the most comprehensive regarding health and healthcare.<sup>107</sup> However, this could have left out some relevant research.

Similarly, only studies completed in the English language were included, excluding any relevant studies in other languages. Although a variety of search terms were used increasing the possibility of finding the relevant empirical studies, studies including patients' perspectives on missed care, which may have been reported in patient satisfaction and quality of care studies, were omitted from the review. The search of the literature was conducted using the variations of the search terms with Boolean operators, and the limited number of records was a surprise. However, we limited the search in general terms, not initiating any search from the different illnesses or health conditions, such as dementia, cancer and similar. As there is a variety of terms used for unmet care needs and missed care, more conceptual work is needed to redefine the concepts. Finally, there were no time limits in the search. The first study was from 1980.<sup>42</sup> The increased complexity of older people's health and health problems may not be present in the earlier studies. However, early studies also revealed unmet care needs and were included in the review.

## Conclusion

The results of this review suggest that unmet nursing care needs are varied and geographically widespread in terms of the three types of unmet needs: physical, psychosocial and spiritual. The nature and apparent frequency of unmet care needs raises consequential concerns for individuals, groups of individuals and the ethics of care, and sometimes seem to undermine modern active ageing and ageing in place policies.<sup>13</sup>

Front-line healthcare professionals and their aides are not solely responsible for the unmet needs of older people found in this review, particularly when strategic decisions fail to support strategic policies. In the review, this discrepancy was demonstrated by regional health disparities and unequal access to nursing or other services after assessed needs. Further redefining the responsibilities of professionals and informal caregivers or family members is needed whether all unmet care needs are due to professional nursing or to others. However, it would be very difficult to identify which of the identified unmet nursing care needs, representing holistic human needs, are not properly the focus of nurse professionals.

Unmet care needs warrant further consideration as there are numerous unmet care needs ranging from the many basic needs to more complex needs. Moreover, the focus of the reviewed research has mainly been from the professionals' perspective, with only a limited number of studies from the patients' point of view. There is also evidence of unmet care needs associated with care rationing. The results also indicate that it is not only the unmet or met care needs but also the level of meeting those needs that should be considered. While being cared for in a healthcare setting, patients should be able to expect that care will be provided according to the best evidence-base available and will thus be of good quality. A further consideration is needed for those vulnerable patients, such as people with memory disorders, who are not able to express their needs and who may need an advocate to help them. Ageing in place and the next decade of healthy ageing<sup>94</sup> set demands for meeting the needs of older people. This requires comprehensive care assessment, planning and provision managed by carers with competence.

As care and access to healthcare services are fundamental rights of human beings, unmet care needs raise serious ethical concerns which should be studied and highlighted in decision-making regarding resource allocation. These matters should also be acknowledged in policy development regarding the healthcare and health service provision for older people.

## Acknowledgements

On behalf of the \*RANCARE Consortium COST Action – CA 15208:

**Chair:** Papastavrou Evridiki (Cyprus, Cyprus University of Technology); **Vice Chair:** Lemonidou Chryssoula (Greece, University of Athens); **WG Leaders:** Sermeus Walter (Belgium, Leuven Institute for Healthcare); Schubert Maria (Switzerland, University of Basel); Suhonen Riitta (Finland, University of Turku); Riklikiene Olga (Lithuania, Lithuanian University of Health Sciences).



Acaroglu Rengin (Istanbul University, Turkey); Andreou Panayiota (Cyprus, Cyprus University of Technology); Antonic Darijana (Bosnia & Herzegovina, Public Health Institute, Banja Luka, Republic of Srpska); Ausserhofer Dietmar (Italy, Landesfachhochschule für Gesundheitsberufe Claudia); Baret Christophe (France, CNRS, LEST); Bosch-Leertouwer Helen (Netherlands, Windesheim University of Applied Sciences); Bragadottir Helga (Iceland, University of Iceland); Bruyneel Luk (Belgium, Katholieke Universiteit Leuven); Christiansen Karin (Denmark, VIA University College); Čiutienė Rūta (Lithuania, Kaunas University of Technology); Cordeiro Raul (Portugal, Instituto Politecnico de Portalegre); Deklava Liana (Latvia, Riga Stradins University); Dhaini Suzanne (Lebanon, American University of Beirut); Drach-Zahavy Anat (Israel, University of Haifa); Eftathiou Georgios (Cyprus, Cyprus University of Technology); Ezra Sigal (Israel, Sheba Hospital, Sheba Medical Centre); Pilan Fuster (Spain, Universitat Internacional de Catalunya); Gotlib Joanna (Poland, Medical University of Warsaw); Gurkova Elena (Slovakia, University of Presov); Habermann Monika (Germany, Hochschule Bremen Neustadtswall); Halovsen Kristin (Norway, Oslo and Akershus University College Applied Sciences); Hamilton Patti (United States, Texas Woman's University); Harvey Clare (Australia, CQUniversity Australia); Hinno Saima (Estonia, Tartu Health Care College); Hjaltadottir Ingibjorg (Iceland, University of Iceland); Jarosova Darja (Czech Republic, University of Ostrava); Jones Terry (United States, The University of Texas at Austin); Kane Raphaela (United Kingdom, Liverpool John Moore University); Kirwan Marcia (Ireland, Dublin City University, School of Nursing and Human Sciences); Leino-Kilpi Helena (Finland, University of Turku); Leppée Marcel (Croatia, Institute for Healthy Ageing, Slovenska); Amorim Lopes Mario (Portugal, INESC-TEC); Millere Inga (Latvia, Riga Stradins University); Ozsaban Aysel (Turkey, Istanbul University); Palese Alvisa, (Italy, Udine University); Patiraki Elisabeth (Greece, University of Athens); Pavloska Katina (FYR Macedonia, Institute for mental health for children and youth); Phelan Amanda (Ireland, University College Dublin, School of Nursing, Midwifery & Health Systems); Postolache Paraschiva (Romania, 'Grigore T. Popa' University of Medicine and Pharmacy of Iasi); Prga Ivana (Croatia, Andrija Stampar Teaching Institute of Public Health); Rasch Agripina (Romania, University of Medicine and Pharmacy Carol Davila); Rengel Diaz Cristobal (Spain, Hospital Universitario Virgen de la Victoria de Malaga, Campus Universitario de Teatinos); Rochefort Christian (Canada, University of Shebrook); Scott Anne (Ireland, National University of Ireland, Galway); Simon Michael (Switzerland, University of Basel); Stemmer Renate (Germany, Catholic University of Applied Sciences Mainz); Tichelaar Erna (Netherlands, Windesheim University of Applied Sciences); Toffoli Luisa (Australia, University of South Australia); Tonnessen Siri (Norway, University College of Southeast Norway); Uchmanowicz Izabella (Poland, Wrocław Medical University); Vuckovic Jasminka (Bosnia & Herzegovina, Ministry of Health and Social Welfare Republic of Srpska); Willis Eileen (Australia, Flinders University); Xiao Lily (Australia, Flinders University); Zeleníková Renáta (Czech Republic, University of Ostrava); Zorcec Tatjana (FYR Macedonia, University Children's Hospital Faculty of Medicine University of Skopje).

### **Author contributions**

The conception and design of the study were performed by D.K., R.S., M.S., P.A.S. and EP; acquisition of data was done by D.K., R.S. and M.S.; analysis and interpretation of data were performed by D.K., R.S., M.S., P.A.S. and EP; the article was drafted by D.K., R.S. and MS; and revising it critically for important intellectual content was performed by D.K., R.S., M.S., P.A.S. and EP.

### **Conflict of interest**


The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.


## Funding

The author(s) received no financial support for the research, authorship and/or publication of this article.

## ORCID iDs

Minna Stolt  <https://orcid.org/0000-0002-1845-9800>

P Anne Scott  <https://orcid.org/0000-0002-5790-8066>

Riitta Suhonen  <https://orcid.org/0000-0002-4315-5550>

## References

1. United Nations. Ageing, <http://www.un.org/en/sections/issues-depth/ageing/> (2018, accessed 5 November 2018).
2. Zulman DM, Asch SM, Martins SB, et al. Quality of care for patients with multiple chronic conditions: the role of comorbidity interrelatedness. *J Gen Intern Med* 2014; 29(3): 529–537.
3. Joling KJ, van Eenoo L, Vetrano DL, et al. Quality indicators for community care for older people: a systematic review. *PLoS ONE* 2018; 13(1): e0190298.
4. Houtjes W. *Needs of elderly people with late-life depression; challenges for care improvement*. PhD Thesis, Vrije Universiteit Amsterdam, Amsterdam, 2015.
5. Sandman L and Hofmann B. Why we don't need 'unmet needs'! On the concepts of unmet need and severity in health-care priority setting. *Health Care Anal* 2019; 27(1): 26–44.
6. Herr M, Arvieu JJ, Aegerter P, et al. Unmet health care needs of older people: prevalence and predictors in a French cross-sectional survey. *Eur J Public Health* 2014; 24(5): 808–813.
7. OECD. Health at a glance 2018: State of Health in the EU cycle, [https://doi.org/10.1787/health\\_glance\\_eur-2018-en](https://doi.org/10.1787/health_glance_eur-2018-en) (2018, accessed 13 March 2019).
8. World Health Organization. Integrated care for older people. Guidelines on community-level interventions to manage declines in intrinsic capacity, <https://www.who.int/ageing/publications/guidelines-icope/en/> (2017, accessed 20 February 2019).
9. Beach SR, Schulz R, Friedman EM, et al. Adverse consequences of unmet needs for care in high-need/high-cost older adults. *J Gerontol B Psychol Sci Soc Sci* 2020; 75(2): 459–470.
10. Recio-Saucedo A, Dall'Ora C, Maruotti A, et al. What impact does nursing care left undone have on patient outcomes? *Review of the literature*. *J Clin Nurs* 2018; 27(11–12): 2248–2259.
11. Institute of Medicine. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: The National Academies Press, 2001.
12. EU Charter of the Fundamental Rights. Article 25: the rights of the elderly, <https://fra.europa.eu/en/charterpedia/article/25-rights-elderly> (2007, accessed 3 February 2019).
13. World Health Organization. World report on ageing and health, <http://www.who.int/ageing/events/world-report-2015-launch/en/> (2015, accessed 5 November 2018).
14. Wang T, Molassiotis A, Chung BPM, et al. Unmet care needs of advanced cancer patients and their informal caregivers: a systematic review. *BMC Palliat Care* 2018; 17(1): 96.
15. Moghaddam N, Coxon H, Nabarro S, et al. Unmet care needs in people living with advanced cancer: a systematic review. *Support Care Cancer* 2016; 24(8): 3609–3622.
16. Black BS, Johnston D, Leoutsakos J, et al. Unmet needs in community-living persons with dementia are common, often non-medical and related to patient and caregiver characteristics. *Int Psychogeriatr* 2019; 31(11): 1643–1654.
17. Mazurek J, Szcześniak D, Urbańska K, et al. Met and unmet care needs of older people with dementia living at home: personal and informal carers' perspectives. *Dementia* 2019; 18(6): 1963–1975.
18. Cohen-Mansfield J, Dakheel-Ali M, Marx MS, et al. Which unmet needs contribute to behavior problems in persons with advanced dementia? *Psychiatry Res* 2015; 228(1): 59–64.

19. Isaacs A, Beauchamp A, Sutton K, et al. Care coordination can reduce unmet needs of persons with severe and persistent mental illness. *Front Psychiatry* 2019; 10: 563.
20. Ganesh K and Gupta S. Comparison of unmet needs of patients on treatment of schizophrenia perceived by patients and their family caregivers. *Indian J Soc Psychiatry* 2017; 33(2): 181–186.
21. Puts MT, Papoutsis A, Springall E, et al. A systematic review of unmet needs of newly diagnosed older cancer patients undergoing active cancer treatment. *Support Care Cancer* 2012; 20(7): 1377–1394.
22. Johnson S, Bacsu J, Abeykoon H, et al. No place like home: a systematic review of home care for older adults in Canada. *Can J Aging* 2018; 37(4): 400–419.
23. Marrero J, Fortinsky RH, Kuchel GA, et al. Risk factors for falls among older adults following transition from nursing home to the community. *Med Care Res Rev* 2017; 76(1): 73–88.
24. Vaudin A, Song HJ, Mehta M, et al. Measuring nutrition-related unmet needs in recently hospital-discharged homebound older adults. *J Nutr Gerontol Geriatr* 2018; 37(1): 30–48.
25. Dezetter A, Duhoux A, Menear M, et al. Reasons and determinants for perceiving unmet needs for mental health in primary care in Quebec. *Can J Psychiatry* 2015; 60(6): 284–293.
26. Choi Y, Nam K and Kim C. Association between convenience of transportation and unmet healthcare needs of rural elderly in Korea. *J Prev Med Public Health* 2019; 52(6): 355–365.
27. Zhen Z, Feng Q and Gu D. The impacts of unmet needs for long-term care on mortality among older adults in China. *J Disabil Policy Stud* 2015; 25(4): 243–251.
28. Abdi S, Spann A, Borilovic J, et al. Understanding the care and support needs of older people: a scoping review and categorisation using the WHO international classification of functioning, disability and health framework. *BMC Geriatr* 2019; 19(1): 195.
29. Jones TL, Hamilton P and Murry N. Unfinished nursing care, missed care, and implicitly rationed care: state of the science review. *Int J Nurs Stud* 2015; 52(6): 1121–1137.
30. Baer B, Bhushan A, Taleb HA, et al. The right to health of older people. *Gerontologist* 2016; 56(Suppl. 2): S206–S217.
31. European Charter of Patients’ Rights. Basis document, [http://ec.europa.eu/health/ph\\_overview/co\\_operation/mobility/docs/health\\_services\\_co108\\_en.pdf](http://ec.europa.eu/health/ph_overview/co_operation/mobility/docs/health_services_co108_en.pdf) (2002, accessed 20 February 2019).
32. Vlachantoni A. Unmet need for social care among older people. *Ageing Soc* 2019; 39(4): 657–684.
33. Arksey H and O’Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005; 8(1): 19–32.
34. Subirana M, Solá I, Garcia JM, et al. A nursing qualitative systematic review required MEDLINE and CINAHL for study identification. *J Clin Epidemiol* 2005; 58(1): 20–25.
35. Kalisch BJ and Williams RA. Development and psychometric testing of a tool to measure missed nursing care. *J Nurs Adm* 2009; 39(5): 211–219.
36. Schubert M, Glass TR, Clarke SP, et al. Validation of the Basel Extent of Rationing of Nursing Care instrument. *Nurs Res* 2007; 56(6): 416–424.
37. Zúñiga F, Ausserhofer D, Hamers JP, et al. The relationship of staffing and work environment with implicit rationing of nursing care in Swiss nursing homes – a cross-sectional study. *Int J Nurs Stud* 2015; 52(9): 1463–1474.
38. Reynolds T, Thornicroft G, Abas M, et al. Camberwell Assessment of Need for the Elderly (CANE): development, validity, and reliability. *Br J Psychiatry* 2000; 176: 444–452.
39. Phelan M, Slade M, Thornicroft G, et al. The Camberwell Assessment of Need: the validity and reliability of an instrument to assess the needs of people with severe mental illness. *Br J Psychiatry* 1995; 167(5): 589–595.
40. Ferreira AR, Dias CC and Fernandes L. Needs in nursing homes and their relation with cognitive and functional decline, behavioral and psychological symptoms. *Front Aging Neurosci* 2016; 8: 72.
41. Iliffe S, Lenihan P, Orrell M, et al. The development of a short instrument to identify common unmet needs in older people in general practice. *Br J Gen Pract* 2004; 54(509): 914–948.
42. Williams RGA. Rationing: how it is done with community services for the older disabled. *Int Rehabil Med* 1980; 2(4): 160–166.

43. Hughes SL, Cordray DS and Spiker VA. Evaluation of a long-term home care program. *Med Care* 1984; 22(5): 460–475.
44. Packham CJ. Needs of elderly people in residential homes: comparison of records held by carers and general practitioners. *J R Coll Gen Pract* 1989; 39(325): 335–337.
45. Paunonen M and Häggman-Laitila A. Life situation of aged home-nursing clients. *J Community Health Nurs* 1990; 7(3): 167–178.
46. Pierson MA. Nurses' knowledge and perceptions related to foot care for older persons. *J Nurs Educ* 1991; 30(2): 57–62.
47. Oktay JS, Steinwachs DM, Mamon J, et al. Evaluating social work discharge planning services for elderly people: access, complexity, and outcome. *Health Soc Work* 1992; 17(4): 290–298.
48. De Veer AJ and de Bakker DH. Measuring unmet needs to assess the quality of home health care. *Int J Qual Health Care* 1994; 6(3): 267–274.
49. Koffman J, Fulop NJ, Pashley D, et al. No way out: the delayed discharge of elderly mentally ill acute and assessment patients in north and south Thames regions. *Age Ageing* 1996; 25(4): 268–272.
50. Mistiaen P, Duijnhouwer E, Wijkel D, et al. The problems of elderly people at home one week after discharge from an acute care setting. *J Adv Nurs* 1997; 25(6): 1233–1240.
51. Clark D and Dellasega C. Unmet health care needs. Comparison of rural and urban senior center attendees. *J Gerontol Nurs* 1998; 24(12): 24–33.
52. Farran CJ, Horton-Deutsch SL, Loukissa D, et al. Psychiatric home care of elderly persons with depression: unmet caregiver needs. *Home Health Care Serv Q* 1998; 16(4): 57–73.
53. Hawkins RJ, Main PA and Locker D. Oral health status and treatment needs of Canadian adults aged 85 years and over. *Spec Care Dentist* 1998; 18(4): 164–169.
54. Sherriff P, Allison J, Large DM, et al. Out of sight – out of mind? *Elderly patients with diabetes in nursing homes. Practical Diabetes Int* 2000; 17(3): 73–76.
55. Martin MD, Hancock GA, Richardson B, et al. An evaluation of needs in elderly continuing-care settings. *Int Psychogeriatr* 2002; 14(4): 379–388.
56. Wilson K, Pateman B, Beaver K, et al. Patient and carer needs following a cancer-related hospital admission: the importance of referral to the district nursing service. *J Adv Nurs* 2002; 38(3): 245–253.
57. Kane RL, Homyak P, Bershadsky B, et al. Outcomes of managed care of dually eligible older persons. *Gerontologist* 2003; 43(2): 165–174.
58. Demiris G, Shigaki CL and Schopp LH. An evaluation framework for a rural home-based telerehabilitation network. *J Med Syst* 2005; 29(6): 595–603.
59. Gaugler JE, Kane RL, Kane RA, et al. Unmet care needs and key outcomes in dementia. *J Am Geriatr Soc* 2005; 53(12): 2098–2105.
60. Smith BJ and Shay K. What predicts oral health stability in a long-term care population? *Spec Care Dentist* 2005; 25(3): 150–157.
61. Fernández-Olano C, Hidalgo JD, Cerdá-Díaz R, et al. Factors associated with health care utilization by the elderly in a public healthcare system. *Health Policy* 2006; 75(2): 131–139.
62. Roberts HC, Hemsley ZM, Thomas G, et al. Nurse-led implementation of the single assessment process in primary care: a descriptive feasibility study. *Age Ageing* 2006; 35(4): 394–398.
63. Atwal A, Tattersall K, Murphy S, et al. Older adults' experiences of rehabilitation in acute health care. *Scand J Caring Sci* 2007; 21(3): 371–378.
64. Drennan V, Iliffe S, Tai SS, et al. Can primary care identify an 'at risk' group in the older population. *Br J Community Nurs* 2007; 12(4): 142–148.
65. Chuang KY, Wu SC, Dai YT, et al. Post-hospital care of stroke patients in Taipei: use of services and policy implications. *Health Policy* 2007; 82(1): 28–36.
66. Raivio M, Eloniemi-Sulkava U, Laakkonen ML, et al. How do officially organized services meet the needs of elderly caregivers and their spouses with Alzheimer's disease? *Am J Alzheimers Dis Other Demen* 2007; 22(5): 360–368.

67. Park YH. Day healthcare services for family caregivers of older people with stroke: needs and satisfaction. *J Adv Nurs* 2008; 61(6): 619–630.
68. Slettebø A, Kirkevold M, Andersen B, et al. Clinical prioritizations and contextual constraints in nursing homes – a qualitative study. *Scand J Caring Sci* 2010; 24(3): 533–540.
69. Naruse T, Nagata S, Taguchi A, et al. Classification tree model identifies home-based service needs of Japanese long-term care insurance consumers. *Public Health Nurs* 2011; 28(3): 223–232.
70. Robison J, Shugrue N, Porter M, et al. Transition from home care to nursing home: unmet needs in a home- and community-based program for older adults. *J Aging Soc Policy* 2012; 24(3): 251–270.
71. Erichsen NB and Büsasing A. Spiritual needs of elderly living in residential/nursing homes. *Evid Based Complement Alternat Med* 2013; 2013: 913247.
72. Nagata S, Taguchi A, Naruse T, et al. Unmet needs for visiting nurse services among older people after hospital discharge and related factors in Japan: cross-sectional survey. *Jpn J Nurs Sci* 2013; 10(2): 242–254.
73. Arbaje AI, Newcomer AR, Maynor KA, et al. Excellence in transitional care of older adults and pay-for-performance: perspectives of health care professionals. *Jt Comm J Qual Patient Saf* 2014; 40(12): 550–551.
74. Freedman VA and Spillman BC. Disability and care needs among older Americans. *Milbank Q* 2014; 92(3): 509–541.
75. Freedman VA and Spillman BC. The residential continuum from home to nursing home: size, characteristics and unmet needs of older adults. *J Gerontol B Psychol Sci Soc Sci* 2014; 69(Suppl. 1): S42–S50.
76. Stewart R, Hotopf M, Dewey M, et al. Current prevalence of dementia, depression and behavioural problems in the older adult care home sector: the South East London Care Home Survey. *Age Ageing* 2014; 43(4): 562–567.
77. Knopp-Sihota JA, Niehaus L, Squires JE, et al. Factors associated with rushed and missed resident care in western Canadian nursing homes: a cross-sectional survey of health care aides. *J Clin Nurs* 2015; 24(19–20): 2815–2825.
78. Nelson ST and Flynn L. Relationship between missed care and urinary tract infections in nursing homes. *Geriatr Nurs* 2015; 36(2): 126–130.
79. Runci SJ, Eppingstall BJ, van der Ploeg ES, et al. The language needs of residents from linguistically diverse backgrounds in Victorian aged care facilities. *Australas J Ageing* 2015; 34(3): 195–198.
80. Brooks-Carthon JM, Lasater KB, Rearden J, et al. Unmet nursing care linked to rehospitalizations among older black AMI patients: a cross-sectional study of US hospitals. *Med Care* 2016; 54(5): 457–465.
81. Wieczorowska-Tobis K, Talarska D, Kropińska S, et al. The Camberwell Assessment of Need for the Elderly questionnaire as a tool for the assessment of needs in elderly individuals living in long-term care institutions. *Arch Gerontol Geriatr* 2016; 62: 163–168.
82. Zúñiga F, Schubert M, Hamers JP, et al. Evidence on the validity and reliability of the German, French and Italian nursing home version of the Basel extent of rationing of nursing care instrument. *J Adv Nurs* 2016; 72(8): 1948–1963.
83. Brooks-Carthon JM, Rearden J, Pancir D, et al. ‘They’re on the fast track’: older blacks describe experiences of nursing care quality during hospitalization. *Clin Nurs Res* 2017; 26(5): 557–575.
84. Dhaini SR, Zúñiga F, Ausserhofer D, et al. Are nursing home care workers’ health and presenteeism associated with implicit rationing of care? A cross-sectional multi-site study. *Geriatr Nurs* 2017; 38(1): 33–38.
85. Henderson J, Willis E, Xiao L, et al. Missed care in residential aged care in Australia: an exploratory study. *Collegian* 2017; 24(5): 411–416.
86. Holup AA, Hyer K, Meng H, et al. Profile of nursing home residents admitted directly from home. *J Am Med Dir Assoc* 2017; 18(2): 131–137.
87. Khandelwal N, Curtis RJ, Freedman VA, et al. How often is end-of-life care in the United States inconsistent with patients’ goals of care. *J Palliat Med* 2017; 20(12): 1400–1404.
88. Berridge C and Mor V. Disparities in the prevalence of unmet needs and their consequences among black and white older adults. *J Aging Health* 2018; 30(9): 1427–1449.

89. Makaroun LK, Teno JM, Freedman VA, et al. Late transitions and bereaved family member perceptions of quality of end-of-life care. *J Am Geriatr Soc* 2018; 66(9): 1730–1736.
90. Blackman I, Henderson J, Weger K, et al. Causal links associated with missed residential aged care. *J Nurs Manag*. Epub ahead of print 23 October 2019. DOI: 10.1111/JONM.12889.
91. Gallagher A, Li S, Wainwright P, et al. Dignity in the care of older people – a review of the theoretical and empirical literature. *BMC Nurs* 2008; 7: 11.
92. Bray J, Evans S, Bruce M, et al. Enabling hospital staff to care for people with dementia. *Nurs Older People* 2015; 27(10): 29–32.
93. Kiljunen O, Välimäki T, Kankkunen P, et al. Competence for older people nursing in care and nursing homes: an integrative review. *Int J Older People Nurs* 2017; 12(3): e12146.
94. World Health Organization. 10 priorities towards a decade for healthy ageing, <https://www.who.int/ageing/WHO-ALC-10-priorities.pdf?ua=1> (2017, accessed 20 February 2019).
95. Bunn F, Goodman C, Russell B, et al. Supporting shared decision-making for older people with multiple health and social care needs: a realist synthesis. *BMC Geriatr* 2018; 18(1): 165.
96. Kydd A and Fleming A. Ageism and age discrimination in health care: fact or fiction? A narrative review of the literature. *Maturitas* 2015; 81(4): 432–438.
97. Levy BR, Slade MD, Chang ES, et al. Ageism amplifies cost and prevalence of health conditions. *Gerontologist* 2020; 60(1): 174–181.
98. Suhonen R, Stolt M, Habermann M, et al. RANCARE Consortium COST Action – CA 15208. Ethical elements in priority setting in nursing care – a scoping review. *Int J Nurs Stud* 2018; 88: 25–42.
99. Scott A, Harvey C, Felzmann H, et al. Resource allocation and rationing in nursing care: a discussion paper. *Nurs Ethics* 2019; 26(5): 1528–1539.
100. DeBrew JK. Can being ageist harm your older adult patients? *Nursing* 2020; 45(10): 66–67.
101. Ayalon L and Tesch-Römer C. *Contemporary perspectives on Ageism*. 1st ed. Cham: Springer, 2018.
102. Duke GJ, Barker A, Knott CI, et al. Outcomes of older people receiving intensive care in Victoria. *Med J Aust* 2019; 200(6): 323–326.
103. Morrissey MB, Herr K and Levine C. Public health imperative of the 21st century: innovations in palliative care systems, services, and supports to improve health and well-being of older Americans. *Gerontologist* 2015; 55(2): 245–251.
104. Nieuwenhuis AV, Beach SR and Schulz R. Care recipient concerns about being a burden and unmet needs for care. *Innov Aging* 2018; 2(3): igy026.
105. Bassah N, Ubenoh US and Palle JN. An exploratory study of the knowledge and practices of family caregivers in the care of the elderly at home in the Buea Health District, Cameroon. *J Gerontol Geriatr Res* 2018; 7(3): 473.
106. Tricco AC, Lillie E, Zarin W, et al. A scoping review on the conduct and reporting of scoping reviews. *BMC Med Res Methodol* 2016; 16: 15.
107. Grant MJ and Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J* 2009; 26(2): 91–108.