



Systematic Review / Meta-analysis

Social needs of individuals with multimorbidity: A meta-synthesis

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ABSTRACT

Social needs refer to the needs associated with the downstream influence of sociocultural and economic determinants affecting the availability of basic amenities, services, and health and social care programs and policies. Social needs are instrumental in shaping the lives and health behaviours of individuals with multimorbidity. Previous reviews explored the care needs, treatment, and support in individuals with multimorbidity. However, the social needs of this population are poorly understood. This review aimed to develop a comprehensive understanding social needs of individuals living with multimorbidity. A meta-synthesis was conducted. Literature was searched within eight databases including gray literature databases. In total, 31 studies published from January 2010 to May 2023 were included in the synthesis. Thematic synthesis approach was used to develop analytical themes and the themes were then mapped to Bradshaw's (1972) taxonomy of social needs. The felt needs included: *Requiring strong social network to combat disease-associated challenges and combat social isolation & Need for readily available health and social care assistance. The expressed and comparative needs included: Need for improved health insurance to compensate for disease related expenses and need for social action to address unfair societal behaviors.* Individuals with multimorbidity sought improved social connectedness and access to readily available health and social care resources. Social stigma associated with disease, race, disability, and physical appearance affects the meeting of individuals' general and health care related social needs.

1. Introduction

Multimorbidity refers to two or more chronic conditions occurring at the same time [1]. The estimated global prevalence of multimorbidity ranges from 42.4 to 57 % [2,3]. Individuals with multimorbidity experience a wide range of physical and psychological symptoms depending on the nature and severity of their diseases leading to deteriorating health outcomes [4,5]. These individuals have a range of physical, social, psychological, health care system related, and emotional needs requiring adequate self and familial management [5–8].

Several reviews have been conducted to understand varying aspects of needs, treatment, and support in multimorbidity. For example, scoping reviews focused on exploring the health, social care, and support needs of older adults with multimorbidity as well as their

caregivers' needs [5–8] and the needs of Indigenous older adults with multimorbidity [9]. Integrative reviews focused on understanding the sociocultural determinants of health in multimorbidity [10] and coping among individuals with multimorbidity [11]. Two qualitative syntheses have been conducted to understand the treatment burden in multimorbidity [12] and the usefulness of chronic care model for meeting the care needs of individuals with multimorbidity [13]. These reviews are valuable as they offer insights into the varying phenomena and aspects related to multimorbidity. However, these reviews fail to offer a contextualized and patient-centered account of the social needs and priorities of individuals with multimorbidity. Simpson et al. [14] highlighted the need to better understand social needs and their associated meanings from the perspective of individuals with multimorbidity to develop a better understanding of mechanisms to address the social

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needs of this marginalized population.

Social needs can be defined as the needs associated with the downstream influence of sociocultural and economic determinants affecting the availability of basic amenities, services, and health and social care programs and policies [14–16]. Social needs are instrumental in shaping the lives and health behaviours of individuals [15]. However, social need is a poorly understood concept within multimorbidity [14] requiring an in-depth exploration so as to inform care, practice, and policymaking for improving the social care of individuals with multimorbidity. While sociocultural determinants and social risk factors linked to social needs may be shared by members of a particular community, population, or group, for each individual the prioritized and preferred social needs differ based on their experiences and living conditions [15]. Therefore, this qualitative synthesis was designed to comprehensively understand this concept from the perspective of those with lived experiences of multimorbidity to uncover their unique and prioritized social needs.

1.1. Theoretical framework

Bradshaw proposed a taxonomy of social needs to differentiate various types of social needs [16]. This taxonomy was adopted as the theoretical framework to interpret the experiences and perspectives of individuals with multimorbidity about their social needs. Bradshaw proposed four types of social needs. First, ‘normative need’ are defined as the needs considered to be important for individuals by experts and welfare professionals involved in developing social and welfare policies. These needs can also be referred to as a “desirable standard” developed by governmental, welfare, and other social organizations. Second, ‘felt need’ are the needs that the individuals or a particular population consider to be integral to their lives. Third, ‘expressed need’ refers to the needs that are articulated by individuals or populations with a demand that actions are taken to address those needs. Finally, ‘comparative need’ pertains to health and care disparities in the provision of services to diverse populations with similar needs [16].

2. Purpose

The purpose of this review was to develop a comprehensive understanding social needs of individuals living with multimorbidity.

3. Methods

A meta-synthesis was conducted because it is a valuable approach for understanding experiences, perspectives of individuals about complex phenomena [17] through summing and, or aggregating findings from qualitative studies [18]. Metasynthesis allows for generating a deep and broad understanding of qualitative literature by enabling generation of integrated and novel accounts of a particular phenomenon. This type of reviews only includes qualitative studies because the intention is to understand a phenomenon or generate an explanatory theory through synthesis of in-depth perspectives and experiences of individuals [18, 19]. The protocol was registered in PROSPERO database on 09/05/2023 (CRD42023422334). The PRISMA guidelines were followed for reporting (N File 1) [20].

3.1. Literature search

An exhaustive literature search [18] was performed in five databases as well as three gray literature databases to identify studies published from January 2010 until May 2023. The literature search was limited to these years to capture more contemporary literature on the topic. The databases included: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, Scopus, Web of Science, and PsycINFO using the indexed terms, keywords, subject headings, and MESH terms. The gray literature databases included: ProQuest, OAlster, and DANS

(Data Archiving and Networked Services). The search terms and MESH headings were first identified from PubMed and compared with the search terms from other databases to choose the most pertinent terms and subject headings. The terms included: “qualitative study”, “lived experiences”, “multimorbidity*”, “comorbidity”, “multiple chronic conditions”, “social needs”, “social care needs”. The tiab-terms and truncation strategies were combined with names of qualitative study designs and Boolean variables “OR” and “AND” for advanced search. Once studies are selected for review, the references list of the selected studies were explored to identify any additional studies. The detailed search strategy is presented in Supplemental File 2.

3.2. Study selection

Initial search retrieved 752 studies from all databases. Of these 752 studies, 113 duplicates were removed using Endnote. The remaining 641 articles were imported into Rayyan online software for systematic reviews (<https://www.rayyan.ai/>). Two independent reviewers (AY & MA) completed the screening after reviewing the study titles and abstracts. This screening resulted in the removal of 597 articles which included quantitative and mixed methods studies, scoping, systematic, integrative, and narrative reviews, and discussion papers on various aspects of care for individuals with multimorbidity. Therefore, 44 articles were entered into full-text screening and eligibility of inclusion in the review. Two reviewers (AY & MA) completed the full text screening independently and then resolved any arising disagreements. The reviewers explicitly outlined the reasons for the section and exclusion of studies so as to understand their decision making of the screening process. Of these 44 studies, 16 studies were excluded because they included both patients and family/informal caregivers/health care professionals as sample; 11 studies were excluded because they explored patients’ experiences of treatment/symptom burden, and 06 studies were excluded because they did not discuss social needs (Supplementary File 3). Therefore, 11 studies were included in the review. To identify additional studies reference lists of the selected studies and excluded reviews were searched. This additional search retrieved 20 studies about lived experience and/or experience of living with multimorbidity. All of the 20 studies were included in the review. Therefore, a final sample of 31 studies were included in the synthesis (Fig. 1). The full-text articles were selected based on the following criteria.

3.2.1. Population and context

Our intention was to select studies that include a diverse group of individuals with multimorbidity such as adolescents, older adults, men, women, and other minority groups such as Lesbian, gay, bisexual, and non-gender conforming individuals. A diverse group of ethnic groups were considered such as White, Black, people of color, and indigenous. Studies from all across the Globe were included to capture the diversity in patient experiences and their social needs.

3.2.2. Inclusion and exclusion criteria

The inclusion criteria were: a) empirical research published from January 2010 to May 2023 in the English language in peer-reviewed journals, b) original qualitative studies including case studies, narratives, phenomenology, grounded theory, ethnography, descriptive qualitative, exploratory qualitative, and interpretive descriptive designs, c) qualitative studies including individuals with at least two or more chronic conditions as the target population and sample, d) studies exploring the lived experiences of individuals with multimorbidity, and e) studies about individuals experiences and perspectives about their social care, social needs, and social care needs. The exclusion criteria are: a) qualitative studies including individuals with multimorbidity along with informal caregivers and/or health care professionals because the focus is exclusively on social needs of patients, b) quantitative and mixed methods studies focused on social needs of patients with chronic diseases and multimorbidities, b) quantitative and mixed methods

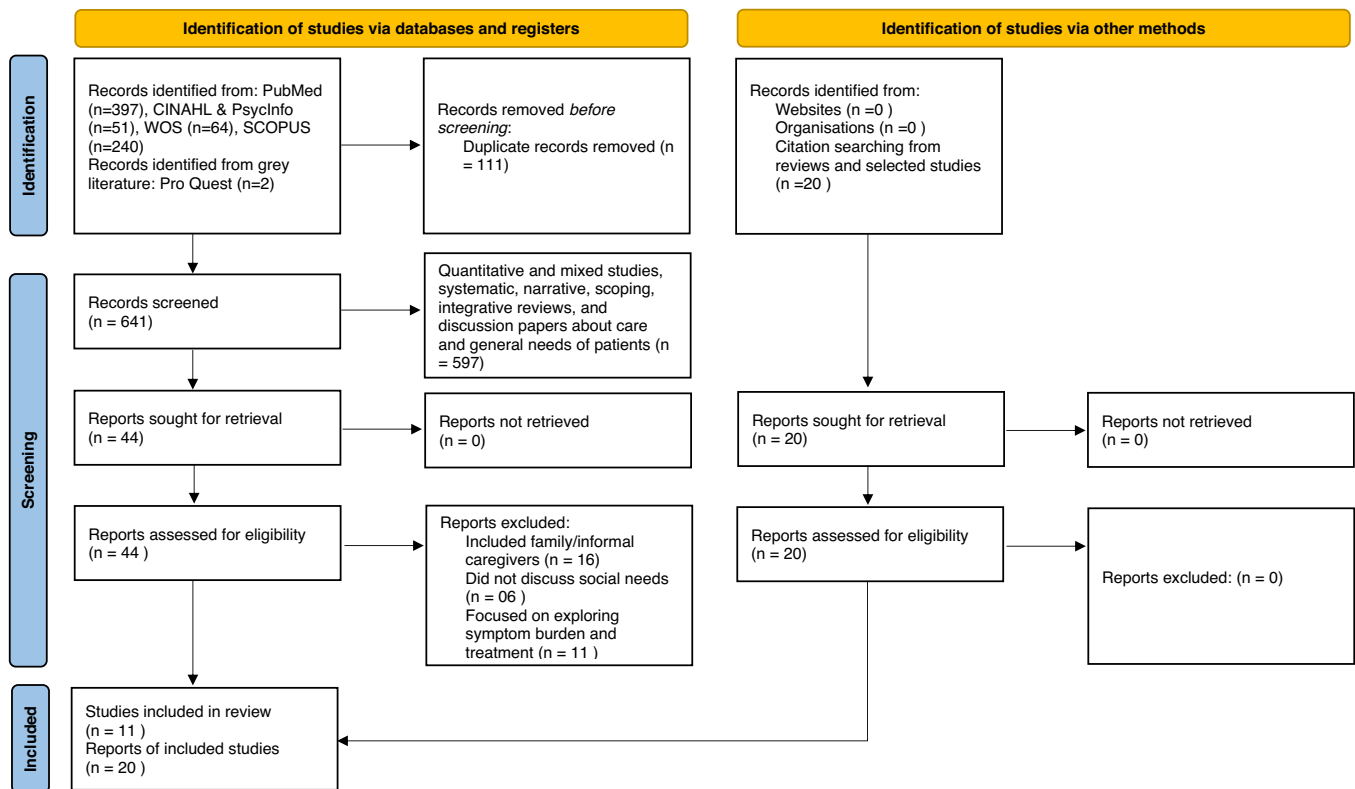


Fig. 1. PRISMA Flow Diagram.

studies about social care for individuals with multimorbidities and b) literature reviews, discussion papers, dissertations, commentaries, editorials, and opinion pieces about the very topic.

3.3. Critical appraisal

The final selected sample of studies was critically appraised with The VAKS (Danish acronym for appraisal of qualitative studies) tool [21]. This tool includes 30 items for critical appraisal of qualitative research. The items are divided in five criteria: general requirements (6 items), credibility (7 items), transferability (5 items), dependability (6 items), and confirmability (6 items) of qualitative studies. Each item in VAKS tool is scored on four-point Likert scale (i.e., totally disagree=1 to totally agree=4). The total score for each criterion is estimated by computing the total points for each criterion and dividing the number items. The cut-off values considered were: strong >15, moderate =10 to 15, and weak <10 [21]. Two reviewers (AY & MA) independently appraised included studies.

The critical appraisal process was first pilot tested on five studies to address any issue and ensure consistency between reviewers. The inter-rater agreement was assessed using Cohen's kappa resulting in 85 % agreement [22]. Any arising conflict and discrepancy were resolved through ongoing conversations and until a consensus was reached and the quality scores were revised. The studies were categorized as low quality, moderate quality, and high quality. No studies were excluded based on the quality scores because even weakly-rated studies can provide crucial contextual information to develop rich description of findings [18]. Therefore, during synthesis emphasis was placed on the findings from high and moderate quality studies and the findings from the low-quality studies were used to support the interpretations drawn from strong and moderately rated studies.

3.4. Data extraction

A data extraction sheet was developed in accordance with the purpose and needs of the review [23] and tailored after initial pilot testing of extraction. Two reviewers (AY & MA) independently extracted the data and then compared the tables and extracted data before finalizing the final extraction sheet with complete data.

The data extraction sheet includes the following information: authors, country, aims/purposes, theoretical framework, design, target population, sample size, sampling technique, sample characteristics, methods of data collection, analysis methods, key findings, and definition of multimorbidity. The strengths and limitations of the studies were also included in the extraction sheet along with the quality rating to aid synthesis of findings from high and moderate quality studies. During the extraction process, any disagreements that arose between the reviewers was resolved through discussion.

3.5. Data synthesis

Thematic synthesis was conducted to integrate qualitative findings [24]. Thematic synthesis involves the following steps. First, the line by line reading was completed for the results and findings section. Second, two authors (AY & MA) independently read multiple times to develop comprehensive understanding of the findings and coded all the relevant findings. The codes comprised words and phrases used in participant quotes, the description of qualitative themes and sub-themes presented in the reviewed studies, and the interpretations of study authors. Third, the codes were organized into first order themes and then collated into descriptive themes. During this stage of analysis, two researchers (AY & MA) worked together and moved back and forth between the codes and studies and revised any discordant descriptive themes. Finally, the descriptive themes were collated based on their shared meaning and converted into analytical themes [24]. The line by line codes were kept close to the findings of the studies but, personal interpretations were

incorporated during the generation of analytical themes. This was done to make our analysis more interpretative than descriptive. After the thematic synthesis, the analytical themes were mapped to the taxonomy of social needs [16] and discussed in accordance with this taxonomy. The mapping process was completed as follows. If the analytical theme reflected the patient perspective about basic social and health care amenities, housing, food, transportation, and social and familial support needs, we mapped those under the category of felt needs. When the analytical themes captured individuals' perspective on the needs for which they demanded immediate or sustained action for resolution, we mapped those as expressed needs. The analytical theme which reflected individuals' perspective comparing the availability of resources, amenities, and services in relation to other patients with similar or different diagnoses or sociocultural backgrounds, were mapped under the category of comparative needs. If the reviewed studies reported individuals' perspective about needs dictated from social and health care professionals, administrators, or local and governmental bodies them, we mapped those under normative needs. Suppose an individual share that administrator of the social welfare center told him that he would need to consult an occupational therapist for assessment of safety issues in his house to prevent falls. This perspective would be labelled as normative need because the administrator dictated the patient an established standard of home safety risk assessment. However, in the reviewed studies none of the individuals voiced that health or social care professional dictated them the type of needs that should be addressed.

4. Findings

4.1. Study characteristics

Of 31 studies, most of the studies originated from the USA ($n = 10$), Canada ($n = 8$), and the UK ($n = 7$). One study each was conducted in Australia, New Zealand, South Africa, Korea, Norway, and Germany. The commonly used research designs were descriptive qualitative approach ($n = 19$) and phenomenology ($n = 6$) while others used interpretative phenomenological analysis, narrative inquiry, longitudinal qualitative design, exploratory qualitative, and secondary qualitative analysis. One study did not specify the design. The sample size ranged from 6 to 116 participants with multimorbidity defined as at least two multiple chronic conditions in majority of the studies ($n = 18$), three or more chronic conditions in three studies. One study defined multimorbidity as four or more chronic conditions. Nine studies did not provide an explicit definition of multimorbidity, but it was apparent that they included participants with two or more chronic conditions. The sample mainly comprised of White individuals with only five studies included Black population, one Korean, one French Canadian, and one Asian and Caribbean population. Most of the studies recruited participants were elderly (60 years or above) and the overall sample included participants aged 18 to 85 years. The most common sampling techniques were purposive and convenience. The methods of data collection included in-depth and semi-structured interviews, document analysis, field observations, and focus groups. A wide range of data analysis methods were used, such as thematic analysis, content analysis, Colaizzi's phenomenological method, and framework-based analysis. Most studies were rated as high ($n = 14$) and moderate ($n = 14$) in quality. Three studies were rated weak in quality. The moderately and strongly rated studies had the following strengths: diverse and adequate samples, rigorous data analysis, detailed and thick description of methods and findings, triangulation, audit trail, reflexivity, and data saturation (Table 1).

4.2. Thematic synthesis

Four analytical themes were generated. The first two analytical themes captured the felt needs, the third theme captured the expressed need, and the final theme captured the comparative needs in accordance

with the taxonomy of social needs [16]. Each of the analytical theme and the descriptive themes are discussed as follows. The thematic synthesis with themes and codes is illustrated in Table 2.

4.3. Analytical theme 1: requiring strong social network to combat disease-associated challenges and social isolation

The first analytical theme comprised two descriptive themes: the need for community connectedness and need for improved family assistance and relationships. Individuals with multimorbidity highlighted the need for strong social network to help them in managing the disease-related challenges and the loneliness. Presence of a strong social network was considered an asset to meet personal, social, and familial care needs and tackle the demanding needs related to self-management, care access, and service use.

4.3.1. Need for community connectedness

The individuals highlighted that better connectedness with their communities is an important social need. The improved community connectedness was seen as an important source for emotional support. Community members provided material and emotional support to these individuals during their tough times [25–33]. For example, McGrath et al. [28] reported that women who experienced homelessness and exclusion from their homes often had some networks in their community and these community members allowed them to sofa surf for considerable periods of time without exhausting their options.

Community connectedness also entailed developing cyber relationships [34] as well as having regular heartfelt conversations with the community members, and participating with them in community activities improved the well-being of these individuals and enabled them to better meet their physical and emotional felt needs [30,35]. Individuals highlighted the need to have more leisure centers in the community so that they are able to continue their cathartic activities O'Brien et al. [36] also noted that often community members would accompany them to the perform activities that they believed helped them in managing their self-care needs related to multimorbidity [25, 26,37,38]. For example, Ploeg et al. [30] noted that the individuals noted meeting with their friends in person on monthly basis and connecting with them virtually regularly to combat loneliness and overcome stress associated with multimorbidity management.

4.3.2. Need for improved family assistance and relationships

Individuals noted the need for improved family relationships and assistance in several areas. These individuals relied on their family members for financial assistance as financial constraints affected these individuals' ability to access care services, joint rehabilitation activities, and perform their day to day activities that offered them comfort [30,32, 38–41]. For example, Tokwe and Naido [31] reported that individuals noted that they do not feel ashamed in seeking financial support from their family because they valued the family centered lifestyle and to them the meaning of family is to help each other in tough times.

Individuals with multimorbidity also reported that their family members helped them in performing their activities of daily living and self-care tasks and often motivated them to overcome the physical challenges to effectively care for themselves [25–27,29–35,37,42–49]. While family was seen as pillar of support in most of the studies, many individuals also reported that sometimes their families neglect them and do not show genuine interest in helping them. These individuals saw themselves as burden on their families or often family members viewed them as burden. Therefore, individuals highlighted the need to develop strong relationships with the family members who were genuinely available to support them in their hard times [29,40,49–51]. For example, some participants in Washington and Williams [52] reported that some of their family members visit them, but the others never call them or visit them even when they need someone during periods of loneliness. These family members do not even offer any excuse of not visiting which

Table 1
Literature Summary Tables.

Authors & Country	Purpose	Def. of Multimorbidity	Methods	Critical Appraisal
Ansari et al. [25] Australia	To understand the impact of a new diagnosis of COPD for individuals living with multimorbidity	2+ chronic conditions	Design: Descriptive qualitative study Sample: Nine men and eight women aged between 43 and 84 years, predominantly White Sample size: 17 Sampling technique: Purposive Data collection: Interviews Data Analysis: Thematic analysis	Strengths: Adequate sample, data saturation, detailed information about the study context, & intercoder reliability assessed. Limitations: Incorrect naming of thematic analysis, underdeveloped themes with topic summaries, no information about audit trail, member checking, reflexivity, & no thick description of study findings. Quality Score: 9.8 Quality Rating: Weak
Kim & Dan [26] Korea	To investigate the daily life experiences of elderly women with diabetes and multimorbidity living	2+ chronic illnesses	Design: Phenomenology Sample: Women 65 years of age or older, Asian (Korean) Sample size: 10 Sampling technique: Purposive Data collection: Interviews face to face and telephonic Data Analysis: Van Manen's Phenomenological analysis	Strengths: Thick description of methods and findings, adequate sample, robust data analysis, data saturation, detailed information about study context Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity and phenomenological bracketing Quality Score: 12.8 Quality Rating: Moderate
Morgan et al. [27] UK	To explore the experiences of women living with multimorbidity in a middle-income country	2+ chronic illnesses	Design: Descriptive qualitative Sample: Women aged 35 and 75 years, Black Sample Size: 20 Sampling: Stratified purposive sampling Data collection: In-depth interviews Data analysis: Thematic analysis	Strengths: Thick description of study findings, detailed information about study context, reasonable sample, robust method of data analysis, audit trail, data saturation, researcher triangulation, and reflexivity Limitations: No discussion of bracketing personal biases and presumptions Quality Score: 18.4 Quality Rating: High
McGrath et al. [28] UK	To explore the complexity of social contexts in which women navigate extreme health inequalities.	Not provided	Design: Descriptive qualitative Sample: Women aged 25 to 58, predominantly White Sample size: 16 Sampling: Convenience Data collection: Interview Data Analysis: Grounded theory analysis	Strengths: Thick description of findings, adequate sample, robust data analysis, and detailed information about study context Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity, secondary data no evidence of data saturation Quality Score: 12.8 Quality Rating: Moderate
Ong et al. [29] UK	To understand the dynamics of social relationships, social connectedness and the fluctuations in the experience of multimorbidity.	2+ chronic conditions	Design: Descriptive qualitative Sample: 12 Men and 15 women aged 50–90, mainly White Sample: 27 Sampling: Purposive Data collection: In depth interview Data Analysis: Thematic analysis	Strengths: Detailed information about the study context, thick description of findings, reasonable sample size, peer debriefing Limitations: Limited information about thematic analysis, no information about audit trail, member checking & reflexivity Quality Score: 11.8 Quality Rating: Moderate
Pleog et al. [30] Canada	To understand the Experiences of living with multiple chronic conditions.	3+ chronic conditions	Design: Interpretive description Sample: 11 men and 10 women aged 65 or above, Caucasian Sample size: 21 Sampling: Purposive Data collection: In-depth interview Data Analysis: Thorne's interpretive description approach	Strengths: Reasonable sample, thick description of findings, robust data analysis, data saturation achieved, audit trail, reflexivity discussed Limitations: Limited information about the study context in relation to the researcher Quality Score: 18.4 Quality Rating: High
Tokwe & Naidoo [31] South Africa	To explore and describe the lived experiences of people living with HIV (PLWH) and hypertension in the Eastern Cape, South Africa.	Not given	Design: Descriptive phenomenology Sample: Five women and four men aged 40 and 59 years, Black population Sample size: 9 Sampling: Purposive Data collection: Semi-structured Interview Data Analysis: Giorgi's phenomenological analysis	Strengths: Thick description of study findings, detailed information about study context, reflective journals maintained, bracketing completed Limitations: No member checking or audit trail Quality Score: 16.8 Quality Rating: High
Townsend [32] Canada	To advance understandings of the lived experience of multimorbidity in broader cultural and structural settings.	4+ chronic conditions	Design: Descriptive qualitative Sample: No details provided Sample size: 8 Sampling: Purposive Data collection: In depth-interviews and symptom/management diary Data Analysis: Grounded theory	Strengths: Thick description of study findings, detailed information about study context, robust data analysis, peer debriefing Limitations: No discussion of reflexivity, member checking, or audit trail, secondary analysis no evidence of data saturation, small sample. Quality Score: 11.8 Quality Rating: Moderate

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Table 1 (continued)

Authors & Country	Purpose	Def. of Multimorbidity	Methods	Critical Appraisal
Duguay et al. [33] Canada	To explore adults' experiences of multimorbidity	4+ chronic illnesses	based and Bourdieu's theory guided analysis Design: Descriptive phenomenology Sample: 4 women and 7 men aged 37–66 years, predominantly French Canadian Sample Size: 11 Sampling: Purposive Data collection: Two Semi-structured interviews with each participant Data analysis: Colaizzi's method of analysis	Strengths: Thick description of study findings, reasonable sample, robust method of data analysis, phenomenological bracketing, researcher triangulation, reflexivity, and audit trail Limitations: Limited information about the study context and data saturation Quality Score: 18.4 Quality Rating: High
Markle et al. [34] USA	To better understand the experience of living with multiple chronic illnesses at midlife	2+ chronic conditions	Design: Descriptive qualitative Sample: Men and women, predominantly White Sample size: 10 Sampling: Convenience Data collection: Illness narrative blogs Data Analysis: Modified grounded theory analysis	Strengths: Thick description of findings, adequate sample, robust data analysis, memo writing, and detailed information about study context Limitations: No member checking, no bracketing, no information about audit trail, secondary data no evidence of data saturation Quality Score: 11.6 Quality Rating: Moderate
Burton et al. [35] UK	To explore how older people with sight loss manage their general health.	No definition provided	Design: Descriptive qualitative Sample: 14 men and 16 women aged 69–95 with chronic illnesses and eye condition, predominantly White one South Asian Sample size: 30 Sampling technique: Not specified Data collection: Semi-structured face to face interview Data Analysis: Thematic analysis	Strengths: Adequate sample, data saturation, detailed information about the study context, robust data analysis, researcher triangulation, thick description of study findings, & peer debriefing Limitations: No information about reflexivity & audit trail. Quality Score: 17.4 Quality Rating: High
O'Brien et al. [36] UK	To investigate the relationship between the management of multimorbidity and 'everyday life work' in patients living in areas of high socioeconomic deprivation	2+ chronic conditions	Design: Descriptive qualitative Sample: 8 women and 6 men aged 30–64, predominantly White Sample size: 14 Sampling: Purposive Data collection: Semi structured interview Data Analysis: Modified grounded theory analysis	Strengths: Thick description of study findings, detailed information about study context, reasonable sample size, robust data analysis, peer debriefing Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity Quality Score: 17.2 Quality Rating: High
Conventry et al. [37] UK	To describe and interpret the life worlds of people living with physical and mental multi morbidity, with a view to understanding how the bodily and emotional dimensions of these life worlds are patterned over time and space.	Not explicit, but included patients with COPD and depression	Design: Phenomenology Sample: 15 Men and 17 women aged 30 to 76, predominantly White Sample size: 32 Sampling technique: Purposive Data collection: In-depth interviews Data Analysis: Interpretative phenomenological analysis	Strengths: Thick description of methods and findings, adequate sample, robust data analysis, data saturation, detailed information about study context, & methods triangulation Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity Quality Score: 13.4 Quality Rating: Moderate
Signal et al. [38] New Zealand	To gain insight into patients' viewpoints on coping with multimorbidity.	2+ chronic diseases	Design: Phenomenology Sample: 28 women 33 men aged under 65 years, Māori, White, and Pacific Sample size: 61 Sampling: Purposive Data collection: Focus groups and interviews Data Analysis: Thematic analysis	Strengths: Thick description of study findings, detailed information about study context, reasonable sample, and method triangulation Limitations: Inappropriate method of data analysis, unclear if hermeneutic or descriptive phenomenology, no phenomenological bracketing, reflexivity, member checking, or audit trail. Score: 9.8 Rating: Weak
Morris et al. [39] UK	To examine what influences self-management priorities for individuals with multiple long-term conditions and how this changes over time	2+ chronic illnesses	Design: Longitudinal qualitative study Sample: 10 women and 11 men aged 36 to 84, predominantly White Sample size: 21 Sampling: Purposive Data collection: Semi-structured interview Data Analysis: Thematic analysis Patton's approach	Strengths: Thick description of study findings, detailed information about study context, and peer debriefing during data analysis Limitations: No member checking, no bracketing, unclear method of data analysis, no information about audit trail, and reflexivity, secondary data no evidence of data saturation Quality Score: 10.6 Quality Rating: Moderate
Simmonds et al. [40] UK	To investigate how primary care patients perceive the connections between their physical well-being and mental health, their	Not Given	Design: Descriptive qualitative Sample: 19 men and 11 women aged 47–85, White, African/Afro-	Strengths: Thick description of study findings, detailed information about study context, reasonable sample, and peer

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Table 1 (continued)

Authors & Country	Purpose	Def. of Multimorbidity	Methods	Critical Appraisal
	lived experiences with depression and CHD, and their self-help methods and opinions on existing primary care interventions for depression.		Caribbean and Asian ethnicities Sample size: 30 Sampling: Consecutive Data collection: In-depth interviews Data Analysis: Thematic analysis	debriefing Limitations: No reflexivity, member checking, or audit trail. Score: 12.8 Rating: Moderate
Tuzzio et al. [41] USA	To explore the personal values and experiences of patients from three distinct groups with complex medical, behavioral, and social needs.	Not Given	Design: Descriptive qualitative Sample: 10 women 14 men aged 48 to 86 years, White, Black, & Hispanic Sample size: 24 Sampling: Purposive Data collection: Semi-structured interviews. Data Analysis: Template coding approach	Strengths: Thick description of study findings, detailed information about study context, reasonable sample, robust data analysis, peer debriefing Limitations: No discussion of reflexivity, member checking, or audit trail. Quality Score: 13.2 Quality Rating: Moderate
Bayliss et al. [42] USA	To identify perceived barriers to self-care among Patients with comorbid chronic diseases	2+ chronic conditions	Design: Descriptive qualitative Sample: 13 Women and three men aged between 31 and 70 or above, predominantly White Sample size: 16 Sampling technique: Not specified Data collection: Semi-structured interviews with free listing technique Data Analysis: Qualitative comparative analysis method with some content analysis	Strengths: Adequate sample, data saturation, detailed information about the study context, robust data analysis. Limitations: No information about audit trail, member checking, reflexivity, & no thick description of study findings. Quality Score: 12.8 Quality Rating: Moderate
Clarke & Bennet [43] Canada	To examine what it is like to live with multiple morbidities in later life.	3+ chronic conditions	Design: Descriptive qualitative Sample: 16 men and 19 women aged 73+, predominantly White Sample: 35 Sampling technique: Purposive Data collection: In depth interview with each participant twice Data Analysis: Thematic analysis	Strengths: Adequate sample, data saturation, detailed information about the study context, robust data analysis, researcher triangulation, thick description of study findings, & peer debriefing Limitations: No information about reflexivity & audit trail. Quality Score: 17.4 Quality Rating: High
Corser & Dontie [44] USA	To explore the perceived healthcare needs of adults with comorbid conditions with on self-management practices and relationships with primary care providers.	2+ chronic illnesses	Design: Exploratory qualitative Sample: At least 21 years old, 14 males and 4 females, predominantly White Sample Size: 18 Sampling: Purposive Data collection: Focus groups and chart audits Data analysis: Content analysis	Strengths: Thick description of methods, adequate sample, robust data analysis, data saturation, detailed information about study context, & methods triangulation Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity Quality Score: 13.6 Quality Rating: Moderate
Löffler et al. [45] Germany	To understand the experiences of coping in older adults with multimorbidity	3+ chronic illnesses	Design: Narrative inquiry Sample: 13 women and 6 men with a mean age of 75 years, predominantly White Sample size: 19 Sampling: Random Data collection: Narrative in-depth interview Data Analysis: Constant comparative method	Strengths: Thick description of methods and findings, adequate sample, robust data analysis, data saturation, detailed information about study context Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity Quality Score: 13.7 Quality Rating: Moderate
Semb et al. [46] Norway	To explore what young adults with co-occurring mental health and substance abuse issues find challenging in experiencing a sense of belonging in their community	Not provided	Design: Descriptive qualitative Sample: Five men and two women aged 18–30, mainly Norwegian Sample size: 7 Sampling: Not specified Data collection: Semi-structured interview Data Analysis: Thematic analysis	Strengths: Detailed information about the study context, thick description of findings Limitations: Incorrect naming of thematic analysis, no information about audit trail, member checking, data saturation, & reflexivity Quality Score: 9.8 Quality Rating: Weak
Slomka et al. [47] USA	To elicit the lived experiences of multimorbidity with HIV.	2+ chronic conditions	Design: Descriptive qualitative Sample: 16 men and six women aged 23–63, Black/African American Sample size: 22 Sampling: Not specified Data collection: Focus groups Data Analysis: Conventional and directed content analysis	Strengths: Thick description of study findings, detailed information about study context, reasonable sample size, robust data analysis Limitations: No member checking, audit trail, reflexivity Quality Score: 13.2 Quality Rating: Moderate

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Table 1 (continued)

Authors & Country	Purpose	Def. of Multimorbidity	Methods	Critical Appraisal
Ho et al. [48] Canada	To understand the challenges patients with multimorbidity face in accessing community care	2+ chronic conditions	Design: Secondary analysis cross-sectional data of individuals with multimorbidity Sample: Not specified Sample Size: 116 Sampling: Purposive Data collection: Semi-structured interviews Data analysis: Exploratory interpretive analysis	Strengths: Thick description of study findings, reasonable sample, robust method of data analysis, audit trail, data saturation, researcher triangulation, and reflexivity Limitations: Secondary data analysis and limited information of the study context Score: 16.2 Rating: High
Schoenberg et al. [49] USA	To improve understanding of how vulnerable rural residents experience and manage multimorbidity	2+ chronic conditions	Design: Descriptive qualitative Sample: Men and women aged 41 years and older, predominantly White Sample size: 20 Sampling: Purposive Data collection: Interviews Data Analysis: Iterative approach/Thematic code book approach	Strengths: Detailed information about the study context, reasonable sample, thick description of findings, robust data analysis, data saturation achieved, peer debriefing, intercoder agreement Limitations: No information about audit trail, member checking, & reflexivity Quality Score: 17.2 Quality Rating: High
Ward [50] USA	To provide an opportunity for individuals to share their experience and talk freely about their experiences of living day to day with these disorders.	Not given	Design: Descriptive phenomenological Sample: 11 women one man aged 33 to 52, White and Black/African American Sample size: 12 Sampling: Purposive and snowball Data collection: Face-to-face in depth interviews Data Analysis: Colaizzi's method	Strengths: Thick description of study findings, reflective journals maintained, bracketing completed, data triangulation, audit trail, peer debriefing, member checking Limitations: Limited information about the context and relationship to the researcher Quality Score: 18.4 Quality Rating: High
Warren-Jeanpiere et al. [51] USA	To describing how age identity, comorbidities, social responsibilities, and relationship status of older HIV-positive African American women influence their HIV self-management	2+ chronic conditions	Design: Not stated Sample: Women aged 52–65, African American Sample Size: 23 Sampling: Purposive sampling Data collection: Focus groups Data Analysis: constant comparison approach	Strengths: Thick description of study findings, detailed information about study context, robust data analysis, reflexivity, peer debriefing, audit trail, theoretical saturation Limitations: No member checking Quality Score: 17.0 Quality Rating: High
Washington & Williams [52] UK	To understand individuals' experience of living with an amputation and a chronic condition in order to help clinicians identify those in need of counselling support.	Not given	Design: Interpretative phenomenological approach Sample: Four men and two women with mean ages of 65 and 69 years respectively, predominantly white Sample: 6 Sampling: Purposive Data collection: Interviews at two point in time Data Analysis: interpretive phenomenological analysis	Strengths: Thick description of study findings, detailed information about study context, robust data analysis, and data triangulation Limitations: No member checking, no bracketing, no information about audit trail, and reflexivity, small sample, no discussion of saturation Quality Score: 10.2 Quality Rating: Moderate
Villena & Chesla [53] USA	To understand the social and structural barriers that individuals with co-occurring mental illness, substance abuse, and general medical conditions encounter in healthcare	2+ chronic conditions	Design: Interpretive hermeneutic Design Sample: 11 men and 9 women mean age of 51, African American, Caucasian, Latino & American Indian ethnicities Sample size: 20 Sampling: Purposive Data collection: Interview Data Analysis: Benner's interpretive analysis	Strengths: Thick description of study findings, reasonable sample, robust method of data analysis, member checking, reflexivity, bracketing, and researcher triangulation Limitations: Limited information about study context Quality Score: 18.4 Quality Rating: High
Ravenscroft et al. [54] Canada	To the perspective of people with multimorbidity on navigating the health care system in Ontario, Canada	2+ chronic conditions	Design: Interpretive descriptive design Sample: Nine men and 11 women aged 45 to 74, Caucasian and Black Sample size: 20 Sampling: Theoretical sampling Data collection: Interview Data Analysis: iterative, constant comparative analysis	Strengths: Detailed information about the study context, reasonable sample, thick description of findings, robust data analysis, data saturation achieved, reflexivity discussed Limitations: No information about audit trail, member checking Quality Score: 17.6 Quality Rating: High
Beverly et al. [55] USA	To explore older patients' perceived impact of chronic co-morbid conditions on Type 2 diabetes self-management.	2+ chronic conditions	Design: Descriptive qualitative Sample: 18 women and 14 men aged 60 years or above, predominantly White Sample size: 32 Sampling technique: Purposive Data collection: Focus groups	Strengths: Adequate sample, data saturation, detailed information about the study context, robust data analysis, researcher triangulation, audit trail, member checking & peer debriefing Limitations: No information about reflexivity & no thick description of study findings.

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Table 1 (continued)

Authors & Country	Purpose	Def. of Multimorbidity	Methods	Critical Appraisal
			Data Analysis: Focus group analysis Kasey & Kruger's approach	Quality Score: 18.4 Quality Rating: High

could be heart breaking. These individuals indicated that having family members by their side is important for them to develop emotional strength to combat their disease related challenges and changing life circumstances.

4.4. Analytical theme 2: need for readily available health and social care assistance

This theme comprised of two descriptive themes namely, need for health and social care resources and need for health professional to contribute in addressing the social needs of individuals with multimorbidity. The individuals expressed that the health and social care resources should be readily available to them so that they are better able to meet their felt needs. They highlighted that health care professionals can play a dual role; addressing their health care needs and contributing to address their social needs linked to their multimorbidity.

4.4.1. Need for health and social care resources

Individuals noted that the health care and social resources and services are often not readily available in their community and are at a great distance from their homes [36,44,47–49]. Some made comparisons between urban and rural areas and noted that their areas (i.e., rural) lack most of the basic amenities within limited social and health care centers. Common examples of amenities included lack of parking spaces, elevators for those cannot use stairs, shuttle services for those with disabilities [28,36,48]. For example, individuals in O'Brien's et al. [36] discussed that participants living conditions were extremely alarming and the local government send them to places where the houses are cheap and nasty and basic health and social care centers (e.g., leisure centers and community centres) are not available.

Individuals also raised concerns that they do not receive information about the health and social services that are available for them and how to access those services. The examples included transportation services for individuals with disabilities and patient support groups [35,36,38,44]. For example, Corser and Dontje [44] noted that some participants in their study were frustrated with the services providers because when they requested information about available services, they were told to visit the emergency or urgent care when anything alarming happens. Burton et al. [36] reported that only a few individuals were aware of the Dial-a-Ride services launched by the government for individuals with disability and living allowance to access healthcare services.

4.4.2. Need for health professionals to contribute in addressing social needs

Individuals expressed that health care professional did not pay attention to their social issues and needs (e.g., financial situation, family and community support and its impact on their health, limited welfare services) when delivering care services [41,44,53]. They highlighted the need for health care professionals to be mindful of their social issues and needs and tailor the care accordingly [44,53,54]. For example, Tuzzio et al., [41] noted that many participants reported that their health care professionals did not view their illness and needs holistically and ignored how social issues could be impacting their self-care and diseases management. Some individuals noted that if their physicians would be better aware of their family lives and troubles they can better gage how to help them in managing their diseases.

The individuals with multimorbidity hoped for greater involvement of health care professional in guiding their general and social decision making [41,46,54]. For example, Ravenscroft et al. [54] noted that many participants wanted their health care professionals to be more

involved in the decision-making regarding disease management and social care services access. Signal et al. [38] noted that many individuals were frustrated with the health care professional because they kept giving them referrals requisitions instead of sitting with them and inquiring about their issues, the availability of social and welfare services.

4.5. Analytical theme 3: need for improved health insurance to compensate for disease related expenses

This theme comprised of two descriptive themes. First, descriptive theme captured individuals' perspectives on the availability and coverage of health insurance and the second theme captured the impact of limited insurance on their health and social care. The individuals expected an improvement in the coverage of their health insurances so that they are better able to meet their health care needs and promote their health and well-being.

4.5.1. Availability and coverage of health insurance

Many individuals with multimorbidity did not have any health insurance [39,51], and those who had insurance noted that it did not cover several major needs such as psychologists and counselling consultations, participation in rehabilitation services (physiotherapy, patient support groups) [38,41,53,55]. For example, Beverly et al. [55] noted that individuals who have financial and/or insurance barriers had to selectively attend services based on their perceived importance which affected their ability to manage multimorbidity. Villena and Chesla [52] noted that many participants did not access health services in emergency cases and had to wait for the appointment day because they did not have the financial support or insurance to cover for extra appointment or transportation. Generally, studies reported that these individuals indicated the need for better financial and welfare assistance programs for the government [35,41,51,53].

4.5.2. Impact of limited insurance

The limited health insurance greatly impacted the disease management of individuals with multimorbidity. They reported that they had often they had to cut out their essential medications and social services because the health insurance did not cover for it [27,30,41,55]. The participants were unable to joint rehabilitation and patient support groups and seek psychological services when needed [35,37,41]. For example, Tuzzio et al. [41] reported that individuals whose family doctor moved to another town had trouble getting to appointments because the insurance did not cover for the visits to the doctor.

4.6. Analytical theme 4: need for social action to address unfair societal behaviors

This theme comprised of two descriptive themes capturing the differential attitudes of the society towards individuals with multimorbidity who also had physical disabilities and the general stigma based on disease, race, and the living circumstances. These two themes were reported in only five studies. The individuals emphasized that there should be social action from the community, health care professionals, and government to combat the stigma and differential attitudes that can affect the access to health and social care.

Table 2
Thematic Synthesis and Social Needs Taxonomy.

Social Needs Taxonomy	Analytical Themes	Descriptive Themes	Codes
Felt Needs: The needs that the individuals or a particular population consider to be integral to their lives [16].	Requiring strong social network to combat disease-associated challenges and combat social isolation	Need for community connectedness	Need someone for daily conversations [30,35] Need someone to accompany for comforting activities (e.g., Aqua Aerobics, walks) [25,26,37,38] Need for leisure centres in the community [36] Need someone for emotional support [25-33] Relaying on cyber relationships [34] Financial support from family members [30,32,38,40,41,43] Family members motivate in performing self-care [31,43] Requiring family support to perform activities of daily living/ accessing health services [25-27,29-35,37,42-49] Seeking genuinely caring family members 29, 40, 49-51] Needing family members do overcome isolation [25-27,29-35,37,42-49] More accessible health and social care services [36,44,47-49] Better amenities within health and social care centres (e.g., elevators, parking, support for disability) [28,36,48] Better information on availability of social programs [35,36,38,44]
		Need for improved family assistance and relationships	
	Need for Readily available health and social care assistance	Need for health and social care resources	
		Need for health professionals to contribute in addressing social needs	Need for health care professional to guide in general and social decision making [41,46,54] Health care professionals should focus on social care needs and issues [44,53,54] Health professionals

Table 2 (continued)

Social Needs Taxonomy	Analytical Themes	Descriptive Themes	Codes
Expressed needs: The needs that are articulated by individuals or populations with a demand that actions are taken to address those needs [16].	Need for improved health insurance to compensate for disease related expenses	Availability and coverage of health insurance	ignore the social care needs [41,44,53] No health insurance [39,51] Health insurance limited and only covers for minimal expenses [38,41,53,55] More governmental financial assistance programs [38,41,53,55] Cutting out needed medications [27,30,41,55] Inability to join rehabilitation and support groups [35,37,41] Inability to seek psychological services [41]
		Impact of limited insurance	Stares from individuals due to disability [52] Denied nursing home admission due to body features (too tall & too heavy) [48] Disease related stigma affecting forming social relationships [51] People associate disease (HIV) with race (Black people) [47] Disease related prejudices in health system [47] Tenants who were homeless had protection rights violated [28]
Comparative needs: This type of needs pertains to health and care disparities in the provision of services and resources to diverse populations with similar needs [16].	Need for social action to address unfair societal behaviors	Differential attitudes of society towards individuals with different body features	
		Stigma based on disease, race, and living conditions	
Normative Needs: The needs considered to be important for individuals by experts and welfare professionals involved in developing social and welfare policies. These needs can also be referred to as a “desirable standard” developed by governmental, welfare, and other social organizations” [16].	None Identified		

4.6.1. Differential attitudes of society towards individuals with different body features

Individuals who has multimorbidity as well as physical disabilities reported that health care professionals and sometimes peers treated them in a discriminatory manner [48,52]. For example, Ho et al. [48] reported that individuals who were tall and had obesity were denied access to nursing homes. The staff noted the reason that the individuals were heavy, tall, and obese and the nursing home do not have the resources to feed them. Washington and Williams [52] noted that individuals with disabilities noted receiving stares from peers and general public as if they are from a different world. These individuals noted that such stares were uncomfortable and made them feel like a burden.

4.6.2. Stigma based on disease, race, and living conditions

Individuals with multiple chronic conditions (e.g., HIV) that are stigmatized in the society reported experienced stigma in the health care settings, community centers, and social gathering merely because of their diagnosis [47,51]. They also reported experiencing prejudices from health care professionals and staff when they accessed health and social services. These individuals noted that often race (being a black individual) subjected them to more stigma because their disease was perceived to be associated with their race [47,51]. For example, Warren-Jeanpiere et al. [49] reported that individuals with HIV and associated chronic conditions reporting difficulties in developing social relationships as many people feared interacting with them. Some individuals with multimorbidity who experienced homelessness were subjected to stigma and often their social rights were violated. For example, McGrath et al. [28] that women relying on social support to rent places for limited time did not receive the tenant protection and were evicted from their homes without a court order.

5. Discussion

The purpose of this review was to understand social needs of individuals living with multimorbidity. Overall, two analytical themes were generated to capture the felt needs and one each to capture the expressed and comparative needs based on Bradshaw's taxonomy. No data were identified in relation to normative needs. Therefore, indicating a clear research gap to better understand the normative needs of this population across different contexts and cultures. A majority of the studies originated from the Western countries highlighting the need to explore the social needs of individuals with multimorbidity in low and middle-income countries.

The essential felt needs of these individuals were the need for strong social networks involving community members and family members and forming enhanced relationships with the family members. The individuals relied on their social network for emotional, physical, and financial support. This highlights that the quality of social networks is integral to managing multimorbidity because social networks can help them address economic instability, frailty, and social isolation. Meeting of these need eventually enable them in enhancing their health promotion activities and manage multimorbidity [14,56]. Therefore, health care professionals and social care organizations should regularly assess the social networks of these individuals and, in case of weak social networks, direct them in accessing and locating relevant social services. The review findings also highlighted that these individuals expressed the need for greater involvement of care professionals in addressing their social needs. Therefore, health professionals should be knowledgeable about available social services and social and financial assistance programs and provide necessary information and referrals for these individuals. Research suggested that lack of social networks can influence health outcomes, self-management, hospitalization, and health care costs for these individuals [57,58]. Further research can focus on comparing the health outcomes in individuals with strong and weak social networks and developing and evaluating interventions to help them in improving social networks.

The individuals highlighted the need for more readily available and accessible health and social services and amenities to support them in their efforts to manage multimorbidity. This calls for more structural changes in the health and community care settings for meeting this social need. Local governments and health and social support organizations need to focus on ensuring that basic amenities and social services are available to these individuals. This may require policy changes to relocate resources and funds to build community and social support centers and equip them with basic and advanced equipment in accordance with the needs of individuals with multimorbidity and disability. Provision and revision of health benefits and insurance was also highlighted; therefore; governments should also introduce more health and social care assistance programs to address the unmet social needs for this population. Future research in this area could have two streams. First, to explore and examine the lack of amenities in available social and health centers and involve individuals with multimorbidity in the planning and decision making (patient engagement research) to ensure the provision of amenities. Second stream of research could focus on development and testing of social policy interventions and support programs and evaluating their usefulness in addressing the social needs. Research is warranted in diverse sociocultural contexts and low- and middle-income countries as well to ensure that underserved individuals receive the support needed to overcome their challenges.

Individuals noted that they often experience stigma based on their physical features and the type of disease (i.e., HIV), if it is linked to a certain race in the societal perception. Previous research also demonstrated that individuals with multimorbidity often experience stigma particularly in the presence of a concurrent mental health disorder, HIV, or substance abuse problem [59–61]. However, there is limited understanding about the link of stigma with the social needs within the context of comparative needs. Therefore, future research is needed to better understand the nature, extent, and impact of stigma on the social needs and care for individuals with multimorbidity across a range of high resource and low resources settings. This review highlighted that individuals with multimorbidity desired a need for community social action against stigma to improve the effectively address their social needs and improve the delivery of social care. Therefore, local governments and health care organizations with a particular context as well as global organizations should develop programs, policy, and concrete plans to address stigma. Adiuoku et al. [62] noted some strategies to combat sigma COVID-19 stigma at a global and local level. The similar ways can be applicable for addressing multimorbidity associated social stigma and may include: developing community offices in local contexts to monitor stigmas and social threats, running social media campaigns, promoting positive beliefs and attitudes, and educating and raising awareness general public. Additional ways may include partnering with local associations and individuals with lived experiences of the diseases and stigma to implement and evaluate the effectiveness of these strategies.

6. Limitations

We only included the English language studies with most originating from the USA, UK, and Canada representing western part of the world. Therefore, the findings may not be relevant to low- and middle-income countries in Asia, Africa, and South America. For literature search we used MESH terms and did not use free text terms such as “basic needs”, “fundamental needs”, and “unmet needs”, which may have introduced selection bias and influenced the final sample of reviewed studies. During thematic synthesis value judgments were incorporated during the generation of descriptive and analytical themes which may have influenced the drawn interpretations. Nonetheless, multiple reviewers and assessments were used to ensure that researchers' personal biases do not affect the interpretation of reviewed literature and the reported findings. Using a deductive taxonomy-based analysis may have influenced comprehensive exploration of social needs of this population from

an individual level perspective. Nevertheless, taxonomy-based analysis and synthesis allowed us to better organize large amount of data from the reviewed studies and discern future actionable directions.

7. Conclusions

Individuals with multimorbidity seek improved social connectedness and family relationships and access to readily available health and social care resources. They noted that social stigma associated with disease, race, disability, and physical appearance affects the meeting of their general and health care related social needs. Efforts are needed from families and social acquaintances of these individuals in strengthening their social support networks. The literature review provided in-depth description of the felt needs. However, expressed and comparative needs were rarely discussed in the studies, and no data were identified about normative needs. Therefore, further research is needed to better understand expressed, comparative, and normative needs of individuals with multimorbidity.

8. Future directions

Unmet social needs of individuals with multimorbidity can negatively influence their health outcomes. Therefore, community-based welfare and homecare organizations, specialized health care organizations, and social and health policymakers must take proactive actions to ensure that the social needs of this population are met. Local organizations and governmental bodies can work together to launch new social assistance, travel resources, and health insurance programs to ensure accessibility of formal social support, finances, and health care services. The individuals with multimorbidity particularly those also living with mental health issues and homelessness should be involved in decisions making processes. Greater involvement and engagement of this population in decision making concerning their social needs can be beneficial to target felt needs and develop tailored social assistance programs. Stigma against diverse sociocultural populations with multimorbidity needs to be addressed via community and social media campaigns and educating and raising awareness of general public.

Future research directions include exploring social needs of culturally and linguistically diverse individuals with multimorbidity, designing and testing the effectiveness of social assistance and social support programs and interventions on social needs and health outcomes of these individuals. Community based participatory action research involving greater engagement of this population in research focusing on their needs, and exploration of social needs across the life span can be valuable because social needs can change with age. Finally, the results of this qualitative synthesis can offer direction on developing quantitative data collection instruments for quantifying social needs of individuals with multimorbidity.

Authorship contributions

All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE*):

- 1) Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
- 2) Drafting the article or revising it critically for important intellectual content. *<http://www.icmje.org/recommendations/>

Declaration of competing interest

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